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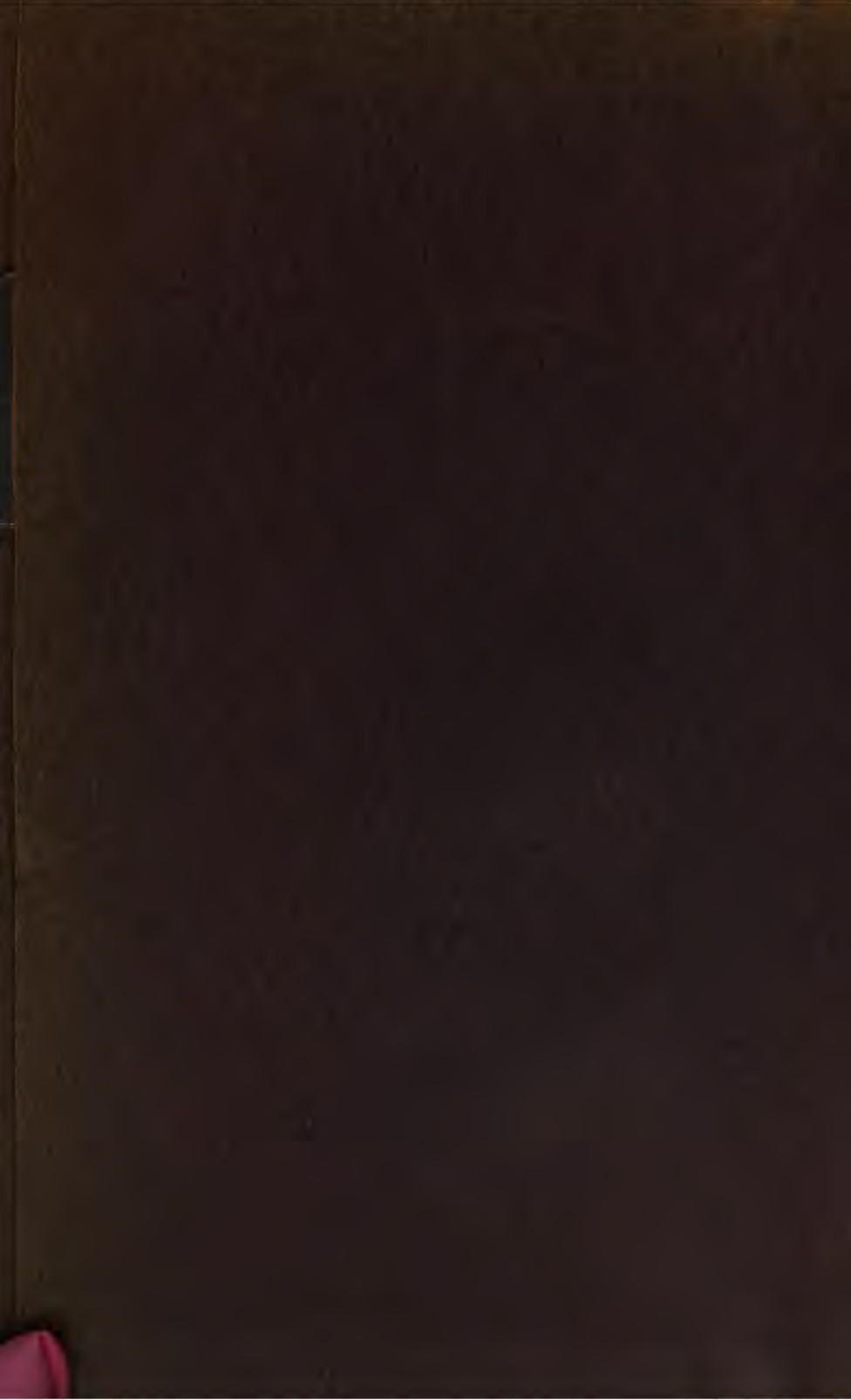
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ILLINOIS TEACHER,
Volume XXII.

CHICAGO SCHOOLMASTER,
Volume VIII.

The Illinois Schoolmaster,

A JOURNAL OF

Educational Literature and News.

JOHN W. COOK,

Editor and Proprietor.

VOLUME IX.

NORMAL, ILL.:

1876.

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ILLINOIS TEACHER,
Volume XXII.

CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

JANUARY, 1876.

NUMBER 92.

ABOUT BRAINS.

The age is scientific. All admit it. The search for truth has become a passion. Scholarship is no longer calm and dispassionate. Triumphs have inspired it. It thirsts for new victories believing itself invincible. It hurls itself upon new fields with the confidence and *elan* of the old armies of the great Napoleon. It proclaims revolutions and decrees progress.

No realm of mind or matter, no field of thought or action, of duty or endeavor, escapes the scrutiny of new science, or the impulse of the new ideas. Social science and religion, as well as the physical sciences and useful arts, have opened their gates, and are submitting their most venerated truths and most credible facts to a new and sharper criticism. Can educational theories expect to escape? Must not the school-room also fall under the dominion of these scientific ideas? The invasion has already begun and the thoughtful observer waits what changes will follow. Let us try to help the "thoughtful observer," by pointing out for him, more precisely, those advances in science which must necessarily modify educational arts and philosophy.

We cannot pause to notice fully the indirect but powerful influence which the wonderful enlargement of the physical sciences must exert by changing the field of study, adding new branches, and lessening the time to be given to the old—a change that cannot long be delayed. We must pass also the changes which science is working in the common, useful arts, making them more scientific in their processes and demanding higher and better education in those who would become experts. These two great facts have already made a deep impression, compelling scientific courses in our old colleges, and calling into existence an entirely new class of schools, the polytechnic institutions of Europe and America. They have also changed the character of high schools till the colleges are uttering the outcry that these schools are no longer preparing students as of old for admission to the classical course of college studies. "Revolutions never go backward."

Let us go deeper. Among the new doctrines of science, or old doctrines with new faces, none is more important or interesting than this, that the human mind and body are so closely knit and related that every thought and feeling is accompanied by an equivalent nerve or brain change. The mind does not dwell in the body simply as a bird in a cage, nor as a man in a shop which he uses for his several works. The connection is organic and in some sense vital. Modern physiology affirms that with every act of perception or memory, of feeling or reflection, there goes a movement of the brain matter and an expenditure of brain force; that we use our brains in thinking as necessarily as we use our eyes in seeing, or our feet in walking; and finally that our capacity for mental action depends on the quantity and quality of our brain and nerve force.

This doctrine does not deny the existence of mind. As Prof. Tyndall says, "Were our minds and senses so expanded, strengthened and illuminated as to enable us to see and feel the very molecules of the brain; were we capable of following all their motions, all their groupings, all their electric discharges, if such there be; and were we intimately acquainted with the corresponding states of thought and feeling, we should be as far as ever from the solution of the problem." How are these physical processes connected with the facts of consciousness? "The chasm between the two classes of phenomena would still remain intellectually impassable."

FIVE IMPORTANT FACTS.

1. The brain and nerves are bodily organs like the hand and the heart, and are nourished by the blood.

2. Like other organs, they are exhausted by use, but are recruited regularly by fresh matter from the blood, and grow stronger by a proper amount of exercise.

3. The brain is in action in all thinking and study, and its substance or force is partially used up by this action, and must be renewed by fresh nutrition.

4. Besides its use in mental action, the brain has two other important functions. 1. It supplies the stimulus and direction for all muscular action, as in walking or talking; and, 2. it supplies the energy for all the vital functions of the body, such as the digestion of the food, the secretion of the various juices required by the system, and the action of all the vital organs. These also use up brain and nerve force, and make fresh demands for rest and recruitment.

5. The brain, like the hand or foot, gains facility by practice, and forms habits by repetition. The power of the practical scholar and thinker is due in part to his brain habits, just as that of the pianist is due to his fin-

ger habits. The lawyer's brain is trained to handle law cases, and the physician's to judge of diseases and remedies. I am not affirming that the brain does this of itself, but that the mind does it through the brain.

The important bearing of all these facts on education is too obvious to be disputed. Granting that the brain is simply the instrument of the mind, it is nevertheless the indispensable instrument, and brain culture is an essential condition of mind culture. The violinist takes the utmost care of his instrument, noting the condition and tension of everything, and doing all in his power to win that mellowness and ripeness of tone which he so covets; how much more ought the thinker to care for that *living instrument* on whose vibrations all his power of thought depends? If the prize-fighter must submit to a severe and protracted training to bring his muscles up to their highest pitch of vigor and endurance, how can we expect to get its best work out of a brain without any proper care for its condition?

Let it be said, once for all, that we do not intend any neglect of the study of ideas, or the acquisition of knowledge. Nor do we ignore what has been called the "discipline of mind." These are, beyond debate, important ends in education. Let them still receive their due share of attention. The science of education on its psychological side has received large and useful consideration. What is now demanded is that it shall receive equally large and earnest study on its physiological side. With the five facts already mentioned before us, who can doubt that there will be found in this study rules as practical and important for our school work, and for the guidance of both teachers and pupils, as any that have been given us by the old philosophy? And if these rules shall be found to agree, in many points, with those already taught us by mental science, this agreement will not only confirm the rules, but will show them to have a double value, as rules both of mind culture and brain culture.

Lack of space forbids any attempt at an exhaustive study of the consequences of the facts stated. Let us content ourselves with a few of the most important

CONCLUSIONS.

1. The uselessness and danger in putting young children to school studies while their nerve force is still small in amount, and chiefly needed to sustain their muscular activity, and the nutritive processes required in their rapid growth. The long, sound sleep of children tells how fully they use up their nerve power. Their plays and sight-seeing will sufficiently exercise the brain and ensure its growth. The baby brain, no more than the baby hand, should be set to serious and protracted work. Some of the best scholars and thinkers I have known, did not begin book-study at all

till ten or twelve years of age, and the great Agassiz is said to have roamed in the woods and fields as free and as busy as the birds and fishes he sought, till he was nearly twelve years old. His magnificent brain had good time to grow strong and healthful.

2. The fit hour for hard study comes not just after eating, while the brain is giving its aid to the stomach, nor after severe exercise which has exhausted its energy. One may, under strong will or compulsion, learn a lesson, but it will be with a tired brain. It may give knowledge, but it hinders education.

3. Students should have good, nourishing food with plenty of fresh air, wholesome exercise and sleep. The nutrition of the brain is the most costly of all the bodily tissues. It takes the best blood and the most of it. He who robs his brain, in the end robs his mind.

4 Study should be made pleasant, joyous, exhilarating, not only for the vividness of the knowledge thus gained, but also for the brain power thus developed. The agreeable feelings increase the nerve force—the disagreeable ones depress it; just as good-tasting food promotes the secretion and flow of the saliva, while distasteful food diminishes it.

5. Brain action, like hand action, must be vigorous to develop strength. Large nutrition goes only where there is large demand made for it. It is the blacksmith's arm and not the writer's which grows colossal and iron-like. Listless study is feeble exercise of the brain.

6. The repetition of knowledge makes it familiar. The repetition of a thought-process gives skill. In learning a trade the hand has to be educated. In learning to think skillfully the brain must be educated. In teaching the hand, we first perform an act slowly and with much care to make it correct; then we repeat the process patiently many hundred times. The same law will hold in teaching the brain. Here as everywhere, "practice makes perfect." Education is made up of strength and skill. Knowledge is mental strength. Discipline is skill. Careful repetitions and reviews are the pathways to both. By abundant repetitions a man learns to know and use ten thousand words. The brain has a place for each one. By a more careful study and equal practice, it will handle these words correctly, and all the ideas, the facts, the laws and logic, they represent.

I pause here, but the truth does not. Science has but begun its inquiries into the wonders of the brain. Let us welcome all it discovers; it will only enhance the grandeur of the soul beyond, and of Him who made both Soul and Brain.

JOHN M. GREGORY.

THINGS WISE AND UNWISE.

1. It is not wise to suppose that a still school is necessarily a successful one. Stillness cannot reign in a work-shop.

2. It is not wise to suppose that those teachers who have "general exercises" for all their visitors, are the best. But little time and energy are required to drill a school to recite the capitals, presidents, the days of the week, months of the year, and to count to one hundred.

3. It is not wise to employ, as a teacher, a girl whose parents are depending upon her for support, *because* such is the case. Charity is one thing, successful teachers, another.

4. When you meet school children upon the street, and receive their cheery salutations: "Good morning," "How do you do?" "Good afternoon," it is wise to infer that the teacher is a moral force.

5. It is not wise to imagine that the teacher who uses such parentheses as: "Be careful," "I think I hear a noise," "That pencil is grating too harshly," "I hear some lips moving," very frequently in the course of a recitation,—it is not wise to imagine that such a teacher is a good disciplinarian, or that she amounts to a penny's worth in the matter of instruction.

6. It is not wise to infer that the teacher who talks longest and loudest at teachers' institutes, and who gives the prettiest theories, is the most successful in the class-room.

7. It is not wise to suppose that the school which is the most perfect machine, is the most successful in making men and women out of boys and girls. Scholars may march out and in to the beat of a drill-bell, rise and sit at signals, be kept off the school-grounds till within five minutes of school-time, toe the mark—literally—in the most approved style, and fold their hands across their chests in the most hurtful manner while in the class,—may do all these and "nothing more."

8. It is wise to judge of results rather than of promises.

9. It is not wise to attempt the prevention of all communication during sessions, nor to feel that your school is a failure because some will whisper.

10. If you have very bright boys and girls, it is wise to put them ahead, rather than to keep them back with their plodding neighbors. Most of the trouble is given by the idlers.

11. It is not always wise to punish both boys in a fight. The teacher who will whip a boy for defending himself when set upon should himself be whipped.

12. It is not wise to threaten a punishment for a certain offence, nor to promise a reward for a given act of well-doing. The "Johnny, if you will go to the store for me I'll give you a nickel," and, "If you don't fetch me some wood, I'll box your ears," policy, should never appear in the school-room.

13. Children admire strength. It is wise not to show the scholars that their misdeeds make you fretful. Irritability is a sign of weakness.

It is not wise to extend the session a few minutes beyond the time, because you have an exercise "that is *so* interesting." C.

ω PSYCHOLOGY III.

CLASSIFICATION OF MENTAL POWERS.

Three Forms. We must now recall what has already been said about the three great forms of mental activity—thinking, feeling and willing. We may ask whether these three are again sub-divided? Two of them certainly are. There are many kinds of thinking, and many kinds of feeling. Willing, however, seems always to be about the same thing, although it may be said to consist of different steps. In order to give you a good idea of the different forms of mental activity, and to enable you to see them all at one glance, on the opposite page we give a synopsis of the whole.

Use of the Synopsis. The student will do well to study carefully the principal headings in the synopsis, and to notice how they are divided. In order to avoid the notion that the mind is complex, and composed of parts, care must be taken about the words used. To say that the mental powers are divided into Intellect, Sensibility and Will, is to convey a wrong meaning to most persons. A better expression is this: The mind acts in three ways,—in Thinking, or Intellect; in the various Feelings, or Sensibilities; and in Willing, or Volition. Again, if we wish to go on with the analysis of the Thinking Power, we may say: The mind thinks in four ways,—in perceiving the qualities of material bodies, or in the Presentative Power; in remembering and imagining, or in the Representative Power; in considering and comparing our knowledge, or in the Reflective Power; and in originating ideas that we cannot learn through the senses, or in the Intuitive Power. To go still farther, we may say: The mind perceives the qualities of external objects in six ways,—by Hearing, by Seeing, by Touch, by Taste, by Smell, and by the sense of Resistance to Muscular Effort. Let this method be continued through the whole synopsis, and the pupil will escape the evil of regarding the mind as divided into parts.

MENTAL POWERS.

Will.	Sensibilities.	Intellect.
DESIRES.	SIMPLE EMOTIONS.	PRESENTATIVE POWER.
		REPRESENTATIVE POWER.
		REFLECTIVE POWER.
INTUITIVE POWER.	RATIONAL.	{ Hearing. Seeing. Touch. Taste. Smell.
		{ Resistance to Muscular Effort. Of the Actual } Mental Reproduction. Mental Recognition. Of the Ideal } Imagination. Synthetic . . . Generalization. Analytic . . . Reasoning.
	INSTINCTIVE.	IDEAS.
AFFECTIONS.	BENEVOLENT.	TRUTHS . . . All simple, self-evident, necessary, Propositions.
	MALEVOLENT.	
	ARISING FROM PHYSICAL CONSTITUTION.	
ARISING FROM MENTAL CONSTITUTION.	{ Cheerfulness Melancholy, Sorrow at the Loss of Friends. Sympathy with the Happiness or Sorrow of others Joy or Sorrow at contemplating our own Excellence, or the Reverse. Enjoyment of the Lullerous. Enjoyment of the New and Wonderful. Enjoyment of the Beautiful and Sublime. Satisfaction in view of our own Right Conduct, and Remorse for Wrong Conduct.	{ Of Space. Of Time. Of Identity. Of Cause. Of The Beautiful. Of Right.
	{ Love of Friends. Love of Benefactors. Love of Home and Country. Envy. Jealousy. Revenge.	{ Desire of Food. Desire of Sex. Desire of Action. Desire of Repose. Desire of Happiness. Desire of Continual Existence. Desire of Knowledge. Desire of Power. Desire of Superiority. Desire of Possession. Desire of Richly. Desire of Miteem.
	ARISING FROM PHYSICAL CONSTITUTION.	

Cannot be understood at once. Of course the synopsis cannot all be fully understood at once. If it could be, further study would be unnecessary. The remaining pages of these papers will attempt to explain the terms used in the synopsis, as well as their relations to each other. In studying these explanations, the pupil will do well to keep the synopsis before him, and to notice the relation of what he is learning to the whole subject. His knowledge will thus become a part of an organized whole.

GENERAL STATES OR ATTITUDES OF MIND.

The Mind knows its own operations. Before going on with the examination of the synopsis, let us consider certain states of mind that are illustrated in all its operations. And, first, we notice that whatever operation the mind is performing, it is aware of the fact. If you remember, you know that you remember. If you believe, you know that you believe. You cannot perform any mental operation without knowing it. You cannot grieve without knowing that you grieve. You are never in doubt concerning that which you have in your mind. When you look off into the distance and think you see a house, you may be in error about its being a house,—the object may turn out to be something else, which only looks like a house. But you are never in error about what you *think* it is. That is, you *know* what is in your mind about it.

Consciousness is the most certain of all Knowledge. This knowledge of our mental states, which is called Consciousness, is the most certain of all knowledge. Indeed all other knowledge depends for its certainty upon consciousness. It comes to us through consciousness. So that if it were possible for consciousness to be mistaken, the mistake would destroy all other knowledge. Some have asked that the truths which we get through our consciousness be proved; but this cannot be done. We have no means of proving them. And we have no choice but to believe them. If we do not believe them, there is nothing left for us to believe. If we do not know what we learn through consciousness, it is impossible for us to know anything.

Is Consciousness a distinct Faculty? Some have maintained that consciousness, instead of being involved in all mental operations, is only one form of mental activity, like memory or the presentative power. They urge the statement that in certain cases, mental acts are performed without consciousness,—that is, that the mind sometimes remembers, perceives, etc., without knowing that it does so. For example, it is said that one may hear a clock strike, and be so absorbed in thought as not to know that he hears it. But if he does not know that he hears the clock, how can it be proved that he does hear it? That the clock makes the requisite noise proves nothing, because that might have been done if the man had been too deaf to hear it. Hearing is an act of the mind, and if the mind is too much absorbed in

other things to be in any degree arrested by the noise of the clock, then it does not hear, even though the drum of the ear be made to vibrate.

Reflective or intensified Consciousness. By an effort of the will,—by continuous trying,—consciousness can be made more effective than it would otherwise be. We know that by long and careful looking at anything,—at a piece of rock, or a bug,—we can find in it many things that would not appear to us at a single glance. So with our mental acts. By keeping the mind fixed upon them continuously, repeating the same act over and over again, if necessary, and carefully noting it every time it is performed, we shall learn much more about our own minds than if we depend upon what we can learn through consciousness without any effort. This intentional, persistent looking at our mental acts is called, by Dr. Porter, Reflective or Philosophical Consciousness.

Necessary in studying Psychology. This form of consciousness must be employed in the study of Psychology. It was said in the first paper that Psychology is a science based upon the phenomena, or acts, of the mind. Every student can, if he chooses, observe these phenomena or acts in his own mind. But a mental act is not easy to observe. It occupies little time. Unless we are prompt to observe it, we find it gone before we learn its character. For this and other reasons, we are very liable to be deceived about it.

Statements ought not to be taken on Trust. It scarcely needs to be said that in this study, the statements of a book ought not to be taken on trust. The student ought to test every statement by observing in his own mind the fact set forth. It is one of the great advantages of this study that every one may, from his own experience and by his own consciousness, verify the teachings of the text-book. In other studies, the conclusions of the author can only be tested by much labor, sometimes involving long journeys and much expense. The student of astronomy, geology, zoology, etc., must go to nature,—to the skies, to distant rocks, to the animals of remote continents—for proof of what he is taught. But the student of Psychology carries with him, wherever he goes, the only means possessed by any one, of testing the truth of statements, and deciding doubtful points. Under these circumstances, to take for granted, without testing them, the statements of others, would be very unwise. A good book is very useful in helping one to think, but it ought not to be allowed as a substitute for observation and thought.

The mind may employ itself upon any Subject it chooses. The mind has the power of selecting any one of its regular activities and confining itself to that. Or it may select the subject of its activity and confine itself to

that. When one confines his mental powers to a certain subject or object, he is said to *attend* to that subject or object; and the act is called *Attention*. Attention, as applied to other things than mental acts, is much like consciousness as applied to mental acts. In attention the mind is drawn away from other things, and concentrated upon the matter under consideration.

Importance of habits of Attention. Many persons are unable to attend effectively to one thing to the exclusion of others. In attempting to follow out a course of thought, they find other things obtruding upon their minds, and disturbing the connection of their ideas and thoughts. After every such break, the separated thoughts must be gathered up anew, and the process of joining them must be gone over again. In this way much time is lost. But that is not all. The thinking is much less vigorous on account of the disturbance, and the thinker has much less confidence in his results. There is but one way of curing this evil. It is by a resolute effort of will, compelling the mind to attend to what is before it. Such an effort is found difficult at first. But with every earnest renewal of it, the power of the will is increased, the habit of attention is strengthened, until at last the mind naturally, and with comparative ease, dwells upon a subject as long as it is needful in order to master it.

Difference between men owing to this. We all know that men differ greatly in their mental capacities, or in their ability to do mental work. Some exhibit intellectual power,—an ability to grapple with different problems, to classify large groups of separate facts, to discern differences unobserved by the mass of people. Others have feeble intellects, and are wanting in these forms of power. This difference is caused chiefly by the fact that some have formed the habit of continuous attention, and others have not. To students nothing is more important than to acquire the habit of attention. Take hold of your thinking with a firm grip. Do not be discouraged at one failure, nor any number of failures. You must endure to the end. If you persist in compelling yourself to attend to a process of thinking, at reasonable times and reasonably often, increasing gradually the length of the process, and the difficulty of the thought, you will in the end be surprised at the power you have acquired, and at the clearness and vigor of your thought.

RICHARD EDWARDS.

The mind and the body are so involved in all educational work that the teacher must study both with much care. He must know "About Brains," and so Physiology must receive careful attention. He must also be a "Mental Philosopher;" hence, Psychology must be an open book to him.

THE COUNTRY SCHOOL.

It is a recognized fact that in all the volumes written on the subject of school management, but little is ever said that applies directly to the teacher in the country, district schools.

The country teacher is told that he "must depend upon his judgment," that he "must adapt himself to the surroundings,"—that he "must keep his eyes open" and "be a live teacher," etc., etc. While the teacher in the academy or graded-school is informed just how to begin, how to proceed with and how to end, his labors in the school, the district-teacher is left "to depend upon his own judgment," "to keep his eyes open," and "to be a live teacher"—while the former is put upon a vessel fully manned and rigged and supplied with all the necessary instruments of observation, the latter is sent out on (often, to him) an untried sea, aboard the merest bark, without chart or compass, without sail or rigging of any kind, himself serving at once as captain, boatswain, helms-man, deck-hand, steward, and ship-carpenter, having often to construct the one rude oar that too often serves the bark as, at once, her only propeller and helm—and while the one is experienced more or less in his work, the other is utterly inexperienced: for it is in the country that the young, educational Alexander of our day and land seeks his first worlds to conquer.

But many good men and women are, and have been, laboring to devise plans for the more successful operation of the common schools, and the SCHOOLMASTER is helping to give these plans, learned by experience, to that class of teachers who are so much in need of light, and so anxious to receive it, so that it shall not always be said of the country teacher, even in exceptional cases, "The blind is sent to lead the blind."

It would be well were Mr. Wells's programme, published in the SCHOOLMASTER for November, or a similar one, in use in every district school in the whole country, and it would be better were every teacher possessed of a full consciousness of the vital importance of plan and system as applied to schools; and best of all if all teachers, as with one accord, would resolve to *act* upon such conviction.

When I think of the long term of years passed at school by many boys and girls in the country, of the importance of this period of their lives, of the many destructive habits they may acquire, and of the little real, practical knowledge they get, I am alarmed. Why, I am acquainted with young men and women who have attended school in their district, winter and summer, during the last thirteen years, and who are to-day unable to read intelligently,

or to write their simplest thoughts grammatically; who cannot calculate the interest on any amount of money for thirteen days at 7 per cent., nor bound the county—ay, the township—they live in. This state of affairs is truly alarming, for what I have said is strictly and literally true, however unreasonable it may seem to some.

But a new era in the history of common-school education is at hand. A bright day is already dawning. Even now the many earnest, faithful workers are hailing the first bright rays of light that skirt the eastern horizon, and harbinger the coming of the full and glorious day.

A few years' earnest, faithful labor in the country school-room will furnish experience from which a thoughtful mind will treasure up information that the neophyte in this work can not afford to be without; for I know of no calling at present that suffers more signal defeat, owing to a want of knowing how on the part of the workers, than common-school teaching. And I think of no community, at present, that suffers the fatal results of incompetency so extensively, and so destructively, or at so great an outlay of money, as the (oftentimes) unsuspecting taxpayers who support such schools.

Whatever may be said of the importance of town-schools, doubly more may be said of the importance of country-schools, for is it not here that the very life-current of the nation circulates?

Let the reader examine and answer the following questions, then follow me through a few suggestions I shall try to make.

Is it true that town schools *are* in a much higher state of perfection than schools in the country?

Is there a single good reason why they *should* be?

Have plan, system, and discipline anything to do with the advanced standing of town and graded schools?

Has the utter absence of these essentials anything to do with the wretchedly backward state of the country schools? *Are* system and discipline essential to the perfect completion of any great work?

Is there a greater or more significant work on earth than stamping the human mind and forming human character? Can not as sound plan, as true system, and as perfect discipline, be enforced in one as in the other school?

The following may be called a sort of introduction to the remodeling of country schools.

When the teacher enters the school-room, let him throw his school into as many classes, or more, as there are different books of the series of readers used in the school. Let him examine each scholar in reading and, beginning with the First Reader, arrange his classes with reference to this examination, and let there be no class below this. There is no time to waste on the isolated letters and the unmeaning *a b abc*.

The qualifications necessary to membership in the Second-Reader class should be the ability to spell orally, or to print neatly, as pronounced, any word in the First Reader, to read the Roman characters for numbers from I to XL, and to read and write the common figures from 1 to 100.

The candidates for the Third-Reader class should be able to spell by sound and by letter, and to write in script, any word, as pronounced, in the Second Reader, and should be able to give a fair analysis,—as to meaning,—of any paragraph or stanza, in that reader, should understand the use of the common marks of punctuation, and be able to read with reference to the sense, and without repeating.

Those entering the Fourth-Reader class should be examined in the Third Reader, with special reference to Articulation, Inflection, Meaning, and Analysis. The highest class in the scale should be called the Fifth-Reader class, for the country scholar has not time to do justice to more than five reading books of a series. The examination for membership should be as above, only on a higher standard.

Having thus ascended the scale of reading classes, let him descend, and let these form the basis upon which to grade his school.

No scholar should be allowed to pursue more than four studies during any one term, so, in the newly arranged school, let those using the Fifth Reader take, in addition, say, spelling, grammar and arithmetic, and see to it that each member pursues the same studies throughout.

Let the next class in the downward scale take, say, primary geography, language, and spelling, with reading.

The Third-Reader class should take spelling, mental arithmetic, and primary geography, in addition to reading, with special attention to oral language-drill.

Let the Second-Reader class take also, spelling, numbers, and oral language-lessons.

The lowest class in the series should be faithfully instructed in the (to them) new work of word-learning, and word-using, with careful attention to the *meaning* of words, and the gradual introduction of the characters that form the words, and so on to the spelling. The Roman characters that are used to number their lessons, and their use, also the Arabic figures, and numbers in these up to one hundred, should be taught in this class.

Now, it remains to name the different divisions, and to arrange a programme for daily guidance, and the teacher is ready to proceed with his work, with a fair show of success.

The classes should be named A, B, C, and D, from the highest class down, letting the two lowest classes share D, for the sake of greater sim-

plicity in programme. Here is the programme I am using in my school now, after a year's work on this plan.

And I should say here that no scholar has been allowed to advance without passing a satisfactory examination.

PROGRAMME OF EXERCISES.

FORENOON.			
TIME.	MINUTES.	RECITATIONS.	STUDIES.
9:00 to 9:10	10	Opening Exercises.	
9:10 to 9:37	10	D 1st Reader.	A & B Arith'c; C and D 2nd Reader, Reading.
9:30 to 9:30	10	D 2nd Reader.	A & B Arithmetic; C Reading; D Slates.
9:30 to 10:00	30	A Arithmetic.	B Arithmetic; C Slate-work; D Slates.
10:00 to 10:05	5	Rest. Song.	
10:05 to 10:25	20	B Intellectual Arithmetic.	A Grammar; C Reading; D Exercise.
10:35 to 10:40	15	C Reader.	A Grammar; B & D Reading.
10:47 to 10:57	10	D 1st Reader.	A Grammar; B & D Reading; C Mental.
10:50 to 11:00	10	D 2nd Reader.	A Grammar; B Reading; C Mental; D Slates.
11:00 to 11:05	5	Rest.	
11:05 to 11:30	25	A Grammar.	B Reading; C Mental; D Slates or Board.
11:30 to 11:50	20	B Reader.	A History; C Mental; D Slates or Board.
11:50 to 12:00	10	C Mental.	A History; B Language; D Reading.
12:00 to 1:00	60	INTERMISSION.	

AFTERNOON.			
TIME.	MINUTES.	RECITATIONS.	STUDIES.
1:00 to 1:10	10	D 1st Reader.	A His.; B Language; C Geog.; D 2nd Reading.
1:10 to 1:30	10	D 2nd Reader.	A History; B Language; C Geog.; D Slates.
1:31 to 1:45	25	A History.	B Language; C Geography; D Slates.
1:45 to 2:00	15	C Geography.	A Geography; B Language; D Slates.
2:00 to 2:25	25	B Language.	A Geography; C Spelling; D Slates or Board.
2:25 to 2:35	10	D General Class.	A Geography; C Spelling; B Spelling.
2:35 to 2:45	10	C Spelling.	A Geography; D Recess; B Spelling.
2:45 to 3:00	15	RECESS.	
3:01 to 3:10	10	D 1st Reader.	A Geography; B Spelling; C & D Reading.
3:10 to 3:30	10	D 2nd Reader.	A Geography; B Spelling; C & D Slates.
3:30 to 3:50	30	A Geography.	B Spelling; C Slates or Board-work; D Slates.
3:50 to 4:00	10	B Spelling.	A Arithmetic; C & D Slate-work.
		DISMISSAL.	

The school in which I have succeeded in putting the above plan and programme into operation, is as fair an example as could have been chosen in which to prove the efficiency of this plan, being as large and as mixed a school as can be found in any country-district in the county.

ABOUT GOOD THINGS OUT OF PLACE.

It is not enough to look at things in themselves alone, without any regard to time, place and circumstance. Or, to adopt a scientific lingo, in order that we may estimate things at their true worth, we must consider them both in their *essence* and in their *environment*. Illinois soil is a good thing; for the growing of corn it is unequaled; but, on our floors or on our faces, it becomes dirt. It is then removed from its proper environment. In fact, there is no better definition of the term *dirt*, than to say that it is matter out of place. And not a few other things besides soil become a nuisance and a plague when they are found where they ought not to be.

This is a truth which the young need to have set before them in one way or another very often. Let me call attention to a few cases of the kind. For one in the street, a hat is essential both to comfort and appearance. For a boy at work in the garden or field, it may be very proper to remove the coat, or even to roll up the shirt-sleeves. If the ground is muddy, there is no better place for the legs of his pantaloons than inside his boots. But, boys are sometimes slow to learn how completely the case is changed when they are in the house, or at the dinner-table, or in the school-room. Working in the field, or on the play-ground, it may be entirely proper to shout in loud tones to one another, calling by nick-names or by pet names. But the case is quite different in the street or in the church porch. It may be very proper and very delightful for young ladies to meet or to part with a kiss in the parlor or the drawing-room; but some people think such demonstrations are not seemly in public. A yard of trailing silk may be both appropriate and graceful on the well-swept carpet, but that does not prove that it will become anything else but a nasty rag when drawn through the filth of the muddy street. For girls to twine their arms affectionately about each other is doubtless beautiful and touching, at the right time and place; but it does not look quite right on the recitation-seat.

For people engaged in teaching, nothing is more important than that they be interested in their calling; and, at the Institute or Teachers' Drill they may well discuss the principles of pedagogy, the methods of teaching arithmetic, or the best way of managing cases of discipline. But it hardly shows good taste when they introduce such topics at a social gathering, or a promiscuous party. Nor, on the other hand, is the propriety any more apparent, when, on such occasions, others crowd such matters upon one whose business is to teach; asking him, perhaps, if he isn't tired of teaching, or making the very original remark that it must be very trying to the patience

to teach, etc. Why is it that teachers are the only persons subjected to such an indignity? Why not say to the blacksmith that it must be very dirty work to make horse-shoes? Or to the banker that he must be in great danger of taking counterfeit money? Are there people who really think that teachers are capable of talking of nothing but school?

To the student, nothing is more important than study; it is his business. But, there are times and places at which study is neither appropriate nor profitable even for him. The gain to be derived from a hasty glance at a book, the last half-minute before recitation begins, is not apparent to some people. Nor is study profitable when one should be eating, or playing, or sleeping. For the student, especially the young student, the "midnight oil" is about the poorest kind of grease; nor is the oil burned long before daylight much better. A teacher of a village school not long since advised his boys and girls to rise at three o'clock in the morning to study. He is said to be a person of good sense; but that piece of advice makes me incline to doubt if the "soft place" on top of his head is yet hardened to bone. A young lady, a few Sabbaths ago, carried her arithmetic to church, and read it in sermon-time. But it may well be doubted if her recitation on Monday was any better than it would have been if she had left her book at home; and it is hardly probable that her mind and heart were any better than they would have been had she stayed with it.

Right things done at the right time, and in the right way, are right. And what is right is always profitable and beautiful. And young people need to be taught that there is a right time and place for every right thing. The advice of the apostle was good, when he said, "Let all things be done decently and in order."

AN OLD BOY.

THAT GEOGRAPHY ARTICLE.

We are driven to the wall. We will turn and fight. We will submit no longer. We were sneered at yesterday, we are beaten to-day, and our persecutors are preparing to annihilate us to-morrow.

In your October number, Dr. Sewall, tired and vexed by a hard day's work, crushes by a single blow the labor of years. The whole plan of teaching geography is wrong. "All that there is in the text-book, is in the text-book still, not a particle has ever been transferred to the brain of the student." The teacher, however, has followed the book. He has found it "a joy forever." "It is his business to ask questions, observe whether, according to the text, the pupil answers correctly, assign another lesson,

and so on, day after day, term after term, and year after year." The Dr. evidently thinks this is all nonsense. He says, "It is better to fix four places in Spain than to go over sixty-eight." Granted. But what are we or our pupils to do if some splenetic examiner chooses to ask a question about a fifth place, and should be so unreasonable as to insist that the future happiness and prosperity of the candidate depend upon his knowledge of that particular fact? One examiner thinks the candidate ignorant if he cannot give the population of Jeddo; another has the same opinion if he cannot give the latitude and longitude of Jan Mayen, or tell what river *drains* the Dead Sea.

At last the Dr. cries, "Let us have a radical reform." But how shall we ignorant teachers begin it? The Dr. does not tell us how to reform. He and other great men have recommended the very text-books we are using. Then they abuse us for following their advice, and for not making our own text-books. Get up your reform, Dr., and publish it. We promise thoroughly to drill in it every pupil who expects to be examined at Normal at least until some other Samson arises to destroy the Philistines. And in your last issue, some one who sighs himself "C" responds to the Dr.'s diatribe by a loud AMEN; and before we have half recovered from the stunning reverberations, he has pushed forward his little plan to revolutionize the world. History! History and Geography! When are we to find the time to teach the history of the world, and of Polynesia besides? County Superintendents say we cannot teach the history of Illinois. How dare we then attempt the task of teaching the world's history? Teach the world's history for the sake of getting geography? What book shall we use? Or, as is usually suggested by would-be reformers, shall we furnish the knowledge and teach without a text-book? I suppose it would be a good thing to do, to prepare ourselves for drawing all the maps, both ancient and modern, and drill our pupils until they can recite this history, while representing the earth's surface on the walls of the school-room. Of course, the true teacher will not pass over this work in such a careless way that it shall be found necessary to repeat the process.

Now, gentlemen, why don't you talk sense? You know that one-half you require from the common-school cannot be done. You know that no man or woman is able to do what you prescribe, and then you find fault because it is not done. Ay, more, you publish the common school teacher all over the country as an ignorant good-for-nothing. According to your creed and that of others like you, he must know everything and be able to teach every thing. He must not only be able to *draw maps* of all the countries of the world, but he must be able to teach drawing in all its branches. He must

be not only a complete master of the ordinary branches taught in our common-schools, and able to make better books than can be purchased at the book stores, but he must also be an animated Cyclopaedia of the Natural Sciences. He must be a pronouncing and descriptive Gazetteer of the world. He must be able to outdo Webster in defining words. He should know Brown's Grammar of Grammars, and all other Grammars, thoroughly. He must know Latin and Greek in order to teach English with success. He ought to know German and French. He must be able to prepare and carry into successful operation a curriculum covering sixteen years of steady work. He must—but the list of essentials is well-nigh endless. But we shall not despair. We never do. Of course we intend to come up to the standard. But you must give us a breathing-spell occasionally. In future numbers give us some more; and though we may die, yet will we bless ye.

A. C. S. T.

SCHOOL-ROOM ENGLISH.

The teacher is peculiarly liable to have his faults fixed upon him by his elevation above openly expressed criticism in the little world of the school-room. Few teachers escape habits of expression that belittle their influence as scholars, and impair the consideration in which cultured people hold them. Few teachers fail to fall into habitual modes of giving directions, or of asking questions that are at last understood by the pupils who have learned their peculiarities, but which are often the cause of much of the seeming stupidity of pupils with a fair knowledge of the proper meaning of English sentences, in their promotion from the care of one teacher with his peculiar school-room English, to another with a new special language. Any teacher can easily extend illustrations by observation of other teachers, even if unable to detect any tendency in himself to a professional dialect that is un-English.

The examples, here given, are not selected for their special offending, but they are those which in the past few hours have come freshly into notice. An algebra of high general merit contains the following problem :

"By selling my horse for 24 dollars, I lose as much per cent. as the horse cost me; what did I pay for the horse?"

An analysis in the book shows that the author meant to say that the per cent. of loss, and the dollars of cost were each indicated by the same number. The author's own pupils might have learned so to interpret the question, but others must interpret it not so much by what it does mean, as by what it cannot mean.

If the printer of the November SCHOOLMASTER has followed his copy, some of the teachers who made a poor record in the late examinations for State certificates may deserve more credit than they received. Particularly in an examination in grammar, the applicant should not be required to rise above the standard of the questions themselves. Among the general questions it seems that the candidates were asked "To what extent should text-books be used in recitations by teachers and pupils?" Probably it was the intention to find out what the candidate thought as to the use of books in recitation by teachers or by pupils, but the applicant should have a liberal allowance for the time used in assuring himself of it.

You print as a question in geography, "Were a line extended through the earth on the Equatorial diameter, and the same line extended through the earth on the Polar diameter, how far would it project, and what of the earth's mean diameter would the projection represent?" The candidate who succeeded in comprehending the extension of the same line through both the Equatorial diameter and Polar diameter deserves credit in geometry or in language, in addition to the marks earned for his knowledge of geography.

The following form of questions applied to unfamiliar objects, would puzzle many, and the candidate might fairly claim exemption for bad English in his answer.

"Name and give the height in feet of the highest mountain in North America, South America, Europe, Asia, Africa."

In the grammar-questions appears this :

"What is a simile, metaphor, a figure of speech, poetic license?"

Should not those rejected applicants have opportunity to tell the examiners what they meant by their answers, rather than receive comment as poor scholars? If teachers who prepare similar lists of questions for examinations in their schools could exchange with each other so as to secure the benefit of general criticism upon their language, the questions of the State examinations would be found too often a type of the daily English of the school-room.

JAS. H. BLODGETT.

Rockford, Ill., Nov. 12, 1875.

§3. Neither the general assembly nor any county, city, town, township, school-district or other public corporation, shall ever make any appropriation, or pay from any public fund whatever, anything in aid of any church or sectarian purpose, or to help support or sustain any school, academy, seminary, college, university, or other literary or scientific institution controlled by any church or sectarian denomination whatever; nor shall any grant or donation of land, money, or other personal property ever be made by the State or any such public corporation to any church or for any sectarian purpose.—*Constitution of Ill.*

STATE EXAMINATION.

1875.

CHEMISTRY.

1. State the atomic theory.
2. What is the valuable element in all fuel, burning oils, and gases ?
Give its chemical symbol, its atomic weight and specific gravity.
3. What is the symbol of pure water ? What two substances make the difference between the wrinkles of 70 and the smoothness and beauty of 20 ?
4. What makes the difference between hard and soft water ?
5. Give the symbol of the element that is the common carrier of creation.
6. Explain combustion.
7. What important product is represented by the symbol CO_2 ?
8. What is organic, and what inorganic, chemistry ?
9. Explain the process of making coal gas.
10. Of what does flour consist ? Explain the process of making light bread.

ALGEBRA.

1. Define exponent, power, root, formula, degree, vinculum, co-efficient.
2. Factor $x^{10}-y^8$, $a^{12}-b^{12}$. Find the product of $x^4+2y^3+y^3-4y-11$, multiplied by x^2-2y+3 , and the quotient of $\frac{x^3}{y^3} + \frac{5+2}{12y^2} + \frac{39}{16}$ divided by $\frac{x}{3y^2} + \frac{1}{2y}$
3. Find the greatest common divisor of $10a^5+10a^3b^2+20a^4b$, and $2a^3+2b^3$, and $4b^4+12a^2b^3+4a^3b+12ab^2$.
4. What is the reciprocal of $\frac{(a-b)^5}{(a-b)^2}$?
5. Define involution, evolution and equation. Expand by the Binomial Formula, $(1+x^2)^5$.
6. What is the 5th root of $x^5+5x^4+10x^3+10x^2+5x+1$?
7. Reduce $a^{\frac{1}{4}}$, $(5b)^{\frac{1}{6}}$, and $(3c)^{\frac{1}{8}}$ to forms having a common index.
8. The sum of two numbers is 8 and the sum of their cubes is 152; what are the numbers ?

9. Find two numbers, such that their sum, their product, and the difference of their squares shall be all equal to each other.

10. Three masons, A, B and C, are to build a wall. A and B jointly can build the wall in 12 days; B and C can accomplish it in 20 days, and A and C in 15 days. How many days would each require to build the wall, and in what time will they finish it if all three work together?

GEOMETRY.

1. What is the subject matter of geometry?
2. Define a point, a line, a surface, volume.
3. From a point without a given line, draw a perpendicular to the line.
4. Draw a common tangent to two given circles.
5. The three angles of a triangle are equal to two right angles. Demonstrate.
6. Given a circle the radius of which is 5, required the radius of a circle with twice the area.
7. A triangle and a parallelogram have equal bases and equal altitudes, the triangle is equal to one-half the parallelogram. Demonstrate.
8. How is an angle *generated* and measured?
9. An arc of a circle is less than any line which envelopes it and has the same extremities.
10. Define a proposition, a theorem, a problem, a scholium, a corollary, a postulate, and a lemma.

NATURAL HISTORY.

1. Define Zoology. Why should it be studied?
2. What is an animal? How is an animal distinguished from a plant?
3. Name the four great divisions of the animal kingdom. What animal stands at the head of the Vertebrates? Give the reason.
4. Name the principal orders of the class Mammalia.
5. Describe the order Carnivora; also the most noted family of this order.
6. Give the distinguishing characteristics of the class of birds. Describe three birds, which, in your opinion, are the most noted ones in the Mississippi Valley.
7. What are insects? Describe the Coleoptera.
8. What are Mollusks? Describe a Gasteropod.
9. What are Radiates? Describe a Crinoid.
10. Describe the Protozoans.

MATHEMATICAL CORNER.

Solutions to Problems in last SCHOOLMASTER.

PROBLEM 1. Assume 16 as the number of feet the body falls in first second, instead of sixteen and one-twelfth. Let x = the number of seconds it rises, y = the number it falls, then (1) $x + y = 7$, and (2) $16x^2 - 16y^2 = 84$.

Divide (2) through by 4, and

$$(3) 4x^2 - 4y^2 = 21.$$

Substitute value of x found from (1), and

$$(4) 4(7 - y)^2 - 4y^2 = 21, \text{ from which}$$

$$(5) 56y = 175, \text{ or } y = 3\frac{1}{8}; \text{ hence } x = 3\frac{1}{8}.$$

Hence $16x^2 = 240\frac{1}{4}$ ft., first answer; and

$$32 \times 3\frac{1}{8} = 124 \text{ ft., second answer.}$$

The above is substantially the solution given by H. C. C.

J. W. sends a correct solution; but more complex.

PROBLEM 2. As the sp. gr. of cork is $\frac{1}{4}$, the force necessary to sink 6 cu. inches of cork in water, is the weight of $4\frac{1}{2}$ cu. inches of water; or as lead *in water* weighs ten times as much as water, one-tenth of $\frac{9}{2}$ cu. inches of lead, or .45 inches, are needed to sink the cork. Now, add lead enough to weigh one pound in water: it will take $\frac{1}{10}$ of $\frac{2}{1\frac{1}{2}}$ of 1728 inches, or 2.7648 inches. The total amount of lead required is 3.2148 inches. This solution varies but little from that of H. C. C. J. W. obtained a correct result, but he uses algebra. C. D. fails to give his answer in inches.

PROBLEMS:

1. It is required to find three square numbers in Arithmetical Progression, such that, if from each its square root be taken, the remainders shall be squares? J. M.

2. To find the relation of the sides of a right-angled triangle to the diameter of the inscribed circle. State this relation as a theorem and give the Demonstration. Deduce Corollaries. J. W.

QUERIES AND ANSWERS.

1. What is the best method of explaining Cube Root? E. T.

The Algebraic Method is the *only* one. What is called an *explanation* by the use of blocks, is merely an *illustration*. For most pupils in classes

in arithmetic, it is best to attempt no explanation; simply, be sure that they can do the work, *neatly, quickly, accurately.*

2. *I notice that Illinois is pronounced Il'linoi, Il'li'noice, and Il'li'noig; which is preferable, and why?* P. F. Y.

There is no good authority for the third pronunciation given above; the others are allowable, but we prefer the second. We do so because it is following the same tendency towards making the sound correspond to the spelling, which has given us the present pronunciation of Louisville, St. Louis, Des Moines, etc., we believe it will be the universal pronunciation of the word, before long. The first is the old pronunciation, and many still contend for it strenuously: but it is neither English, French nor Choctaw.

3. *Is it well to furnish children with books when the parents will not?* When they will not, No. When they can not, Yes.

4. *Should left-handed children be made to use the right hand in writing?*

If you can induce them to use the right hand cheerfully, they will probably thank you hereafter; but, probably it is not best to *make* them do so.

EDITORS' DEPARTMENT.

The President's Message. This is a very long document, and contains many statements of general interest, and some valuable suggestions and recommendations. It is a pity that the President does not write better English; and we think this criticism is called for, after making a large allowance for the telegraph and the types. The President discusses several topics with reference to the fact that this is the centennial year of our history. Among these the Educational question is put first, and most prominent. The gist of what he has to say here was fore-shadowed by his late speech at Des Moines. The following extract presents his central thought on this topic:

We are a republic whereof one man is as good as another before the law. Under such a form of government it is of the greatest importance that all should be possessed of education and intelligence enough to cast a vote with the right understanding of its meaning. A large association of ignorant men cannot for any considerable time oppose a successful resistance to tyranny as oppressive from the educated few: they will inevitably sink in acquiescence to the will of intelligence, whether directed by demagogue or by priestcraft. Hence, the education of the masses becomes of the first necessity for the preservation of our institutions. They are worth preserving because they have secured the greatest good to the greatest proportion of the population of any form of government yet devised. All other forms of government approach it first in proportion to the general diffusion of education and independence of thought and action as the primary step; therefore, to our advancement in all that has marked our progress in the past century, I suggest for your consideration, and most earnestly recommend it, that a constitutional amendment be submitted to the legislatures of the several States for ratification, making it the duty of each of the several States to establish and forever maintain free public schools, adequate to the education of all children in the rudimentary branches, within their respective limits, irrespective of sex, color, birth-place or religion, and forbidding the teaching in said schools of religious, atheistic or pagan text; and prohibiting the grant of any of the school funds or school taxes, or any part thereof, either by legislatures, municipalities or others, for the benefit of any other subject, of any nature or kind whatever.

Near the end he reiterates his recommendations on these points in the following words :

As this will be the last annual message I shall have the honor of transmitting to Congress before my successor is chosen, I will repeat or recapitulate the questions which I deem of vital importance to be legislated upon and settled at this session ; First, that the States shall be required to afford the opportunity of a good common-school education to every child within their limits ; Second, no tenets shall ever be taught in any school supported in whole or in part by the State, Nation, or by the proceeds of any tax levied upon any community ; make education compulsory, so far as to deprive all persons who cannot read and write from becoming voters after the year 1890, disfranchising none, however, on the ground of illiteracy who may be voters at the time this amendment takes effect.

3. Declare the Church and State forever separate and distinct, but each free within its proper sphere, and that all church property shall bear its own proportion of taxation.

It is desirable that questions of education should be mixed up with politics as little as may be ; but, if legislation must deal with them, it is important that it should be of the right kind. And, as there are certain things respecting schools that we believe the American people have made up their minds upon, perhaps the quickest way to forestall all future excitement respecting them is to embody the convictions of the people in our fundamental law.

It is a significant fact, in connection with President Grant's recommendation, that Mr. Blaine, who is perhaps a candidate for high office, has seen fit to express in a published letter, his recommendation that a provision be placed in the national constitution similar to the one in the state constitution of Illinois,—forbidding any sectarian division of the public school-funds, forever. It would seem that the Republican party has determined to make this an issue in the next general election: and doubtless its leaders expect to make political capital out of it, as there seems good reason to suppose they may. But, we hear whisperings from some prominent democrats which lead us to believe that they propose to prevent any gain to the Republicans from this source, by placing themselves on similar ground. We care not what party gains the glory, so that our public-school system is forever removed beyond the interference of mischievous meddlers ; and from present appearances, it looks as though the movements lately made by their enemies in Ohio and elsewhere, would return to plague their inventors : — it is just possible that somebody has fired off a boomerang that may come back in an unpleasant way. At any rate, we are confident as we always have been, that the result will be that "School will keep." And we reiterate what we have said in these pages so many times before, that we believe there is nothing outside of the schools themselves that their friends need to fear.

By referring to our premium list it will be seen that we offer Webster's Unabridged Dictionary for fifteen subscribers and twenty-two and a half dollars, or Worcester's for twelve subscribers and eighteen dollars. These are liberal terms. Our other offers are equally generous. Examine the list !

The appeal of the Centennial committee appears in this number.

The generosity of our legislature shows the estimation in which the educational interests are held by that body.

The matter is now in the hands of the teachers and school officers of the state. To raise a fund of ten thousand dollars will require considerable push: but it can be done. Illinois is no longer a western state, in the sense in which New England uses the term. Her schools take rank with any in the Union, and if the fact is not apparent at the Centennial Exposition, it will be because we have not represented them fairly. Take hold, friends, and push!

Schoolmasters are actually beginning to cut a figure in the politics of the country. The powers that be (or that would be,) have somehow or other got the notion that schools are something beside "a glittering generality" to refer to on national holidays. Well, gentlemen, better late than never! We will overlook the fact that there is an election coming, and believe in disinterested patriotism.

The schools *are* of prime consideration. We have been trying to teach our politicians that fact these many years. If they conclude that the educational interests are so strong that they can safely be ignored no longer, we forgive them for past neglect, and hope to see such little items as National University, no division of school fund on account of sects, &c., &c., promptly attended to.

Dr. Sewall's article on "Geography," that appeared in the October number of the *SCHOOLMASTER*, seems to have occasioned quite a stir in pedagogic circles. The Doctor doubtless indulged in some latitude of expression, but it is evident that something is wrong somewhere. When pupils study geography for four or five years and find themselves unable to tell whether the Rhine flows into the Caspian sea or the Gulf of the Suez, there is ground for the suspicion that something isn't altogether wholesome among the Danes.

What is the trouble? Poor teaching, of course. Well, what is the matter with the teaching?

1. Teachers are attempting too much with their classes. The memory cannot hold the vast number of facts that most books give, and that most teachers ask their pupils to learn.

2. The facts selected to be learned should be, as nearly as possible, *key* facts. Thus it is better to know the direction and extent of a watershed than the location of a dozen towns. Its direction determines the general course of the rivers, has much to do with climate, and, consequently, with productions and occupations.

3. Hence, the study should not be a pure memoriter. Pupils should form the habit of detecting relationships between facts, since related facts are more easily held.

4. The sketching of horizontal forms should be insisted upon. This exercise gives a local habitation to facts. The crayon leaves its mark and if the pupil doesn't *know* the shape he cannot delineate it on the board.

5. Review! review!! review!!!

So geography should cultivate the memory, inculcate habits of generalization, and teach pupils that definiteness is the characteristic of scholarship.

The SCHOOLMASTER has little to say for *himself* just now; he has sounded his own praises lately quite as much as consists with his native modesty. The year just closed has been the most prosperous in his career, and the outlook is still brighter. He puts forth no pledges; he only asks that you judge of the future by the past. He thanks his many friends, his advertising patrons, his canvassers, his contributors, and his readers, for kindnesses already shown; and he bespeaks their good offices for the coming year.

With this number we begin a new year, and the SCHOOLMASTER a new volume. It is well, as we pass the mile stone, to stop for a little, and look before and after. But we propose to leave our readers to furnish their own New-year thoughts, chiefly. Are we wiser than we were one year ago? Did we map out for ourselves some definite field of intellectual work? If so, did we cultivate that field, even in spite of difficulties, till it bore tangible fruit? Above all things are we better than we were one year ago;—better teachers;—better men and women? Have we formed definite plans for the new year? Or shall we drift?

In spite of some discouragements, the *general* outlook is hopeful. The fact that politicians expect to make political capital by coming forward as the champions of Free Schools, shows that these shrewd observers of the national thought believe that, deep in the American heart, nothing is more sacredly cherished than the Free School. And they are wise in this belief. Let teachers see to it that, so far as their influence extends, the schools are worthy of this sacred trust.

A township trustee who has just ordered the SCHOOLMASTER, for next year, to be sent to the directors in four-fifths of the districts in his township, says, "Teachers hereabouts say that they cannot afford to subscribe. I do not like to accuse them of *fibbing*, but it does seem to me that they ought to *take, pay for, and read*, some good educational periodical." So it will

seem to any person of ordinary capacity; and this we know, that teachers who cannot afford a dollar or two to prepare themselves for better work will find probably that their directors cannot afford to increase their wages; and we think they cannot afford to employ them at all. Nor would it be strange if the directors should think as we do before long. Teachers whom we have known to rise in their profession, have always been those who *would* afford to improve themselves.

Is not this number of the SCHOOLMASTER a little better than any that we have ever given you before? DR. EDWARDS'S article will be worth more than the price of the SCHOOLMASTER for a year to many of our readers if they will only *study* it. DR. GREGORY, too, says something about "Brains" that is admirably fitted to go with the Psychology. We prize very highly the article on "Common Schools"; it is a genuine thing, and it comes from a class of teachers that we desire especially to benefit. We do not mean to ignore the wants of Professors, Superintendents and graded school teachers; but if any feel that a large part of our matter is better suited to the common-school work, we are glad of it. That is just as we mean to have it. We hope, too, that the teachers in common-schools will send us more communications. We cannot speak of all the articles, but we are sure that we are giving our readers the worth of their money; and we have the best of evidence that our labors are not unappreciated.

EDUCATIONAL INTELLIGENCE.

Morgan County.—The Teachers' Association of Morgan county held a regular session at Jacksonville, December 4th, in the office of county superintendent, in court house.

On account of the disagreeable state of the weather, the attendance was poor during the morning session; but in the afternoon we were glad to see every seat filled.

Among the prominent members of the audience were several young ladies of the Illinois Female College, of this city.

The meeting was called to order promptly at 10 o'clock by the President, Mr. Higgins, with Miss Emma C. Pierson as Secretary.

We had not the good fortune to be present during the forenoon session, but we are confident that the work went on with its usual zeal, when Mr. Higgins was in the chair.

After opening exercises, Mr. McAdams favored the audience with a recitation entitled, "Darius Green and his Flying-Machine."

Mr. Higgins then made some remarks on the importance of well-arranged programmes in the country schools, which was followed by discussion of same.

The subject of Arithmetical Progression was introduced by Mr. Van Winkle, followed by discussion of same.

The "Common difficulties in district schools," came next under consideration. Several suggestions were made by which these obstacles might be more effectually removed.

A paper was then read by J. R. Richardson on the subject of "Compulsory Education." Supt. Higgins taking the negative side of this question.

Having listened to an essay by Miss Hurst, an oration by Mr. Davidson, and the critic's report by Miss Lou Williamson, the meeting was adjourned till the 8th of January next.

COMMITTEE.

REPORT OF ATTENDANCE FOR NOVEMBER 1875.

	No. Pupils Enrolled.	No. of Days of School.	Av. Number Belonging.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	SUPERINTENDENTS.
Chicago.....	41 538	20	38 552	36 433	95-6	9 617	.....	J. L. Pickard.
Hannibal, Mo.....	1 723	19	1 435	1 349	94	309	637	*G. W. Mason.
Bellefonte.....	1 687	21	.....	1 515	90	359	630	Henry Raab.
Decatur.....	1 579	18	1 479	1 413	95-8	.....	357	E. A. Gastman.
Denver, Col.....	1 510	20	1 379	1 292	93-7	503	.....	Aaron Gove.
Rock Island.....	1 502	18	1 395	1 330	95	94	681	J. F. Everett.
Danville.....	1 424	18	1 193	1 116	93-1	459	.....	Chas. I. Parker.
Pekin.....	919	18	897	834.4	93	107	401	Geo. Colvin.
Warsaw.....	907	20	817	774	94-7	127	408	John T. Long.
Lincoln.....	863	19	700	741	94-4	387	225	L. Kingsburry.
Paris.....	840	21	760	688.2	90-6	230	227	A. Harvey.
Marshalltown, Iowa.....	776	18	732	702	97-1	43	473	C. P. Rogers.
Morris.....	742	18	580	533	92-7	409	191	M. Waters.
Macomb.....	719	20	688.1	557.85	95-6	27	435	J. G. Shedd.
Amboy.....	704	20	599	558	93	531	157	L. T. Regan.
Shelbyville.....	639	18	572	541	95	46	243	T. F. Dove.
Aurora, West Div.....	577	20	540	506	93-7	136	200	L. M. Hastings.
West Champaign.....	577	22	513.3	492.8	95-9	96	197	W. H. Lanning.
Clinton.....	556	19	468.5	442.6	94-4	21	420	I. Wilkinson.
Pontiac.....	509	19	435	428	88	491	151	C. H. Rew.
Wilmington.....	463	18	412	382	95	136	141	R. H. Beggs.
Rochelle.....	451	20	396.3	332.2	90-4	26	265	P. R. Walker.
Rushville.....	450	22	419.6	406	90-7	127	195	Harvey A. Smith.
Lacon.....	427	19	405	376	93	105	135	D. H. Pingrey.
Petersburg.....	423	21	373	333	90	.....	.....	M. C. Connelly.
Lena.....	389	21	350	319	90-1	16	79	C. W. Moore.
Warren.....	369	21	337	377	91	48	135	D. E. Garver.
Griggsville.....	355	18	339	325	95-87	37	188	A. C. Cotton.
Monticello.....	350	.....	.....	298	86-2	153	134	P. T. Nichols.
Collinsville.....	332	25	371.3	275.5	91-4	201	86	C. A. Singletary.
Marshall.....	331	21	325	294	90-4	219	102	L. S. Kilborn.
Lexington.....	308	20	276	264	95	.....	73	J. W. Payne.
Chenoo.....	301	22	277	255	92	254	70	Daniel J. Poor.
Farmington.....	283	19	259	250	96-4	96	117	Henry C. Cox.
W. Belvidere.....	259	20	243	233	91-7	33	105	H. J. Sherrill.
Anna, Union Co.....	257	18	226	217	95	261	54	A. B. Strowger.
El Paso, E. Ward.....	250	22	239	227	95	129	119	B. B. Lakin.
Marine.....	236	20	224	193	86-2	60	74	Wm. E. Lehr.
Bethalto.....	178	19	165	143	88	95	.....	B. F. Stocks.
Heyworth.....	170	22	160	145	91	15	90	S. B. Wadsworth.
Altona.....	164	20	164	154	94	23	99	J. H. Stickney.
Westfield.....	160	21	151	136	85	83	52	Wm. H. Brown.
Buda.....	211	21	183	175	96	24	67	J. N. Wilkins on.

NOTICE.—These reports must reach us before the 16th of the month to insure publication.

*Principal of High School.

Whiteside County.—EDITOR SCHOOLMASTER: We had a profitable time at Tampico on Friday and Saturday last. Dedication exercises in evening, 10th inst., Friday, and Institute on Saturday. Tampico village now rejoices in a new and tasty building and a corps of live teachers. Mr. A. W. Bastian, Principal, and Miss Kate Fuller, assistant. The building is a model of neatness and taste, and the citizens feel justly proud of their schools. Four teachers were made happy by passing in their names for the "SCHOOLMASTER;" most of those present having attended the Normal last summer were then made subscribers. O. M. CRARY.

Winnebago County.—We have received a copy of the *Rockford Gazette* containing the late report to the Supervisors, of Mrs. Carpenter, the County Superintendent. We learn from it that there were 7,721 pupils enrolled, of whom a trifle more than half were girls; there were 298 teachers, of whom 86 were males: total wages paid to teachers, \$38,616.31: highest monthly wages to male teacher, \$133.33 $\frac{1}{3}$, lowest, \$23: highest monthly wages to female teacher, \$50, lowest, \$18; average length of schools, 8 $\frac{1}{2}$ months. We clip the following suggestive sentences from the report:

There has been a gradual raising of the grade required for certificates. By requiring teachers to attend examination every year, instead of renewing their second-grade certificates, I have found that in almost every case they have formed the habit of study, and have done better work the second time. * * * I have visited all the schools twice, and many of them three or four times. In most of the schools I have seen a steady growth in zeal and enthusiasm. A great hindrance to the progress of the schools is the frequent change of teachers. It is a rare thing for a teacher to remain in one school longer than one year, and many schools have a change of teachers every term. * * * I have found, while visiting schools, that frequently much good can be accomplished by seeing the directors, and pointing out to them the particular needs of their school. I have asked directors to visit the schools with me, which they have frequently done. I have endeavored to impress upon young teachers the fact that very much can be done by self-culture. If they will realize that the work of preparation should be of life-long duration, we can expect much good work even from those who should have more age and advantages before entering the field.

A great mistake is made in the country-schools, in placing more value on arithmetic than on any or all other studies. * * * We have had ten teachers' meetings during the year, with an average attendance of thirty teachers. They have been held in different parts of the county, so that we have met the most of the teachers in this way. At these meetings, we have endeavored to impress upon teachers the fact that their duty is not all done when they teach merely the things that parents request them to teach. They should set themselves to work to awaken an interest in such studies as they think the pupils should take; for, in the most of cases, they are better judges than the parents. If the teacher is desirous of accomplishing this end, he will succeed. * * * We have, during the year, organized a Directors' Association, which is to meet at least twice a year.

The male pupils of the Second Grammar School in East Rockford, gave their master a sixteen pound turkey for Thanksgiving. The gift was accompanied by a witty note signed "The Boys." We like that—both the act, and that signature.

Jackson County.—We have made arrangements for a Teachers' Institute at this place on the 7th and 8th of January, and expect them to organize a monthly Institute. Our Co. Supt., Dr. Redd, is alive on the subject of education, and we hope to obtain assistance from the Carbondale professors. THE SCHOOLMASTER will be remembered at the Institute.
JOSEPH HARKER.

Bureau County has begun holding Local Institutes. The first was held Dec. 3d and 4th, in connection with the dedication of a new school building at Olio. The programme was practical, containing such topics as "how to use primary charts," "How to teach fractions, &c."

We notice Mr. G. P. Peddicord, a last year's Normalite, is teaching at Walnut in this county, and learn that he is doing good work.
W.

Mason County.—Schools are in a prosperous condition in Mason county. Our teachers are wide-awake and are doing splendid work. We hold Local Institutes at three places in the county. Havana, Mason City and Forest City, which gives us a meeting almost every Saturday in the month. I am much pleased with the SCHOOLMASTER, and would advise every teacher in the State to take it.

S. M. BADGER, Co. Supt.

Montgomery County.—A Teachers' Institute was held at Litchfield, Nov. 27th. Messrs. Dewell, Mason, Zimmerman, Dickson, Berry, Supt. Springer and others took part. A good time is reported.

Remember THE SCHOOLMASTER, friends!

Kankakee County.—ITEM 1.—The first of a series of four sectional Institutes was held in the town of Essex, commencing Nov. 16th, and continued four days. Twenty or more teachers, representing three towns, were present.

Prof. Jona. Piper, of Chicago, took charge, and with his peculiar adaptability for the work, gave the teachers good, thorough drills in teaching the fundamental

principles of the branches they are expected to teach in school. Wednesday and Thursday evenings were occupied by Prof. Piper and Rev. J. Higby, of Grundy Co.. in practical talks upon educational matters.

ITEM 2.—From annual report. I find that we have the following:

No. of persons under 21yrs. of age.....	12,609
" between 6 and 21.....	8,588
No. enrolled.....	6,478
Total No. teachers.....	263
Paid teachers.....	\$42,693.12
Special tax.....	47,188.96

We take the following from the Educational Department of the *Aurora Beacon*.

At the call of the State Superintendent, Hon. S. M. Etter, a number of educational workers met in the city of Chicago, the 19th ult., to determine what Illinois ought to do to represent her educational progress and present condition, at the approaching Centennial Exposition. About twenty-five persons, representing the different school interests of the State, were present. The Colleges, Normal Schools, Graded Schools, County Superintendency, Boards of Education and Book Publishers were each well represented.

The meeting was held in the rooms of the Chicago Board of Education, and was called to order by Hon. J. L. Pickard, by whose nomination Hon. S. M. Etter was made President.

After stating the object of the meeting, Mr. Etter called upon different persons to express their views. Several hours were spent in an informal expression of views, after which a committee was appointed to systemize the suggestions made, and report a plan of procedure.

A committee on finance was appointed to suggest a method of raising means to defray the expense that will be involved.

The following general plan was agreed upon, which, with slight modifications and additions, is the one prepared by Supt's J. L. Pickard, of Chicago, J. H. Smart, of Indiana, and A. J. Rickoff, of Cleveland, a committee appointed by the National Teachers' Association at its last session, to prepare a plan for a like national purpose:

EDUCATION.		I. HISTORY.	II. APPLIANCES.	III. RESULTS.
		I. HISTORY.		
		II. APPLIANCES.		
		III. RESULTS.		
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	1. Those established by necessity.	1. Primary.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary—Denominational.	2. Denominational.	2. Grammar.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	1. High Schools.	1. Grades.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	2. Normal Schools.	2. Courses of Study.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	3. Colleges.	1. Ordinary.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	3. Universities.	2. Special.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	4. Professional Schools.	1. Reference.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	1. Ground Elevations.	2. Circulating.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	2. Inside Plans.	1. State.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	3. Heating and Ventilating.	2. County.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	1. In Fact.	3. Local.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	2. In Model.	1. Primary School.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	3. In Representation.	2. Grammar School.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	1. Organizations.	3. Normal School.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	2. Teachers.	4. College.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	3. Text-Books.	5. Universities.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	4. Libraries.	1. Examination Papers, prepared on time.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	5. School Journals.	2. Compositions, prepared on time or at will.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	Institutions and Associations.	3. Specimens of Penmanship.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	1. State.	4. Drawings.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	2. County.	1. Maps.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	3. Local.	2. Industrial.
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	1. Botanical.	3. Geological.
I. HISTORY.	2. Public 1. Private Schools.	2. Secondary.	2. Zoological.	
I. HISTORY.	2. Public 1. Private Schools.	1. Elementary.	3. Geological.	

It will be seen that the above scheme is embraced in three grand divisions. It was thought advisable, because of the great amount of work to be accomplished, to separate each grand division into two sections, and assign each to a committee of three.

The committees are as follows:

HISTORY OF PRIVATE SCHOOLS.

Hon. Newton Bateman, of Galesburg, chairman.

Dr. J. M. Sturtevant, Jacksonville.

Dr. J. W. Locke, Lebanon.

HISTORY OF PUBLIC SCHOOLS.

Hon. S. M. Etter, Springfield, chairman.

Prof. J. V. N. Standish, Galesburg.

Prof. Samuel Willard, Chicago.

APPLIANCES.—FIRST GROUP.

Dr. Robert Allyn, Southern Normal, chairman.

Sup't E. L. Wells, Ogle county.

Prof. D. B. Parkinson, Carbondale.

APPLIANCES.—SECOND GROUP.

W. B. Powell, Anrora, chairman.

Hon. Duane Doty, Chicago.

Prof. E. C. Hewett, Normal.

RESULTS.—FIRST SECTION.

Hon. J. L. Pickard, Chicago, chairman.

Prof. Delano, Chicago Normal.

Prof. D. S. Wentworth, Englewood.

RESULTS.—SECOND DIVISION.

Miss Sarah E. Raymond, Bloomington, chairman.

Dr. Thomas, State Entomologist, Carbondale.

Prof. Forbes, Curator of State Museum at Normal.

The department/s of history will be understood readily by our readers. Some brief explanations respecting other departments may not be amiss. In the first group of appliances, it is proposed to represent the early condition, the several stages of advancement, and the present state, by small models, engravings, or photographs, of the old time log school-house with its greased-paper windows, the old time slab seats upon the puncheon floor in front of the stick and mud fireplace; the more pretentious and really comfortable frame building with its pine desks, seats and stove; and the modern palatial structure with its complete appointments and convenient arrangements. Floor plans will be given. The appointments will include the various modes of ventilating, heating and seating, with specimens.

In the second group of appliances will be given systems of grading, and courses of study; the various grades of teachers' certificates, and questions showing what is required to obtain one of them; a presentation of the work and objects of special teachers; ancient and modern text-books, maps and charts; number of reference and circulating libraries with their catalogues; files of school journals; programmes of local, county and state associations, etc.

In the first division of results, there will be represented programmes of the daily exercises of the various departments of the different kinds of schools, and four varieties of work done by the pupils.

The first is to be a written examination, — answers to questions in the various branches of study pursued, propounded by the city or county superintendent.

This examination is to be made at a time and in the manner to be determined by the committee having this division in charge.

The second variety may be compositions or any other general or special work that the principal of the school may desire to exhibit.

The third variety is to be specimens of penmanship.

The fourth variety is to be specimens of drawing, either of maps, or of industrial, ornamental or other designs; or any art or technical work.

It is designed to have all specimens of pupils' work bound.

No better exhibit of a school, except the school itself, can possibly be given than that contemplated by this division, if it be preceded by a tabular view of the course of instruction attempted. One accustomed to study such representations will be able to judge very closely of the nature of a school represented, especially if the statistics to be found in the Department of History be considered in connection therewith.

In the second division of results will be represented what has been accomplished in making collections.

We have laid before our readers, imperfectly, the plans proposed as we now recall them, aided by tolerably full records of the proceedings in our possession. None of the plans are fully matured, and we are sure that the committees will be thankful for any suggestions that may be offered. Let suggestions be sent at once to the chairman of the appropriate committee. To carry out all of these plans in a manner creditable to the important interests they are to exhibit, and to the dignity of the fourth State in the Union, will require much labor, and cost much money. The State Board of Centennial Commissioners have but ten thousand dollars appropriated by the State, at their command, and it was resolved not to ask their aid. It was believed that ten thousand dollars was the smallest sum with which the work could be effected, and that the surest method of raising this sum would be by personal appeal to the teachers of the State. The details of the plan were left to a committee consisting of Hon. S. M. Etter, Springfield, Chairman; Dr. J. M. Gregory, Champaign; Dr. Richard Edwards, Normal.

ITEMS.

The Colorado teachers meet at Denver, Dec. 28, to organize a State Teachers' Association.

The *Kindergarten Messenger*, the organ and advocate of kindergarten training in the United States, unites with the *New England Journal of Education*. Miss Elizabeth P. Peabody, the former editor, will edit a Kindergarten Department in the *New England*.

Wm. H. Smith of McLean Co., has entered upon his duties as Superintendent. Some disinterested friends (?) attempted to have the Board of Supervisors declare the election illegal, but failed ignominiously.

GOD OR GAUD.

Webster and Worcester agree in pronouncing the name of Deity—God. Yet some of our good friends say it is irreverent to do so. Irreverent to call God by his right name! Irreverent not to utter the name of Deity as a lazy school-boy draws out a word he has but half learned! We must be pardoned then for continuing to indulge in such irreverence. Why, to call our earthly father "dad" or "the old man" is reverence itself compared with the impiety of calling our Heavenly Father, "Gawd..."—*Thos. H. Clark in Aurora Beacon*.

ILLINOIS NORMAL.

Term closed on the 16th of December with the usual examinations. We think these examinations, in all departments, never indicated a more successful term's work. The number of visitors was not large; but among them were several old students. A very large proportion of those who have been with us this term express a purpose to return for the winter term. This is well; one term, after getting fairly started in the Normal course, is worth three times as much as the first one; and a continuous course of study is far more profitable than one that is often interrupted. Miss Wakefield received a beautiful ring from section G, as a testimonial of their good will, and of her faithful service.

The Annual Contest took place according to the published programme. We think the debate has never been surpassed on any similar occasion. The result was that the Philadelphians won the debate and the paper, and the Wrightonians the music and oration. According to the laws of marking the exercises, this gives the Philadelphians four points, to three for the Wrightonians. The halls of the societies have been thoroughly repaired; and the walls of the Philadelphian have been beautifully frescoed in oil, while the floor of the Wrightonian is graced by a new Brussels carpet.

The Board of Education held their semi-annual meeting on the 15th; all the members were present but one. After some remonstrance, they voted to accept the resignation of President EDWARDS. They also passed resolutions very complimentary to him. They elected Prof. HEWETT President *pro tem*, and appointed the first Wednesday in March as the time of a special meeting for the purpose of making a permanent appointment. The committee on salaries were instructed to present at that meeting a revision of the salaries of all persons in the employ of the Board.

After the close of school on Thursday, the retiring President, in a few touching words, took leave of the school. Following his address came a short, well-worded and earnest speech from Mr. L. B. WOOD, presenting Dr. EDWARDS with an elegant gold-headed cane, as a parting gift from the students. With much emotion, the President briefly replied. As he took his seat, several of the Professors brought in Lange's Commentary in eighteen thick volumes, and Miss CASE presented them in the name of the Faculty, accompanying the presentation with a modest address full of beauty and feeling. The President undertook to reply, but found his voice

beyond his control, and sat down. The whole scene was an expression of the deepest feeling. After short speeches from Hon. JESSE FELL, Supt. ETTER, and Rev. Mr. PALMER, Mr. CHARLES L. HOWARD read the following resolutions:

WHEREAS, It has transpired that Dr. Edwards has severed his connection with us as President of the Normal University, be it

Resolved, That in his departure we recognize an irreparable loss, and that our love, respect and good wishes go with him to his new field of labors; and,

Resolved, That we recognize the action of the Board of Education in the selection of Prof. Hewett, as temporary successor, a fitting choice, and that we pledge to him our hearty support.

These were unanimously adopted by the students all rising. A song was then sung, and the term was ended.

President EDWARDS will begin his duties as pastor of the Congregational Church in Princeton, on the 1st of January. His family will remain in Normal for the present. The church is one to which OWEN LOVEJOY preached so long.

MATRIMONIAL CHAPTER: (CONTINUED).

Miss MARY A. PENNELL and Mr. ALBERT L. BARBER, of Chicago, were married at Normal on the evening of December 22d.

Miss JENNIE COOLIDGE and JOHN BARLOW, of Coles County, formerly a Model student, were married, the same evening.

Mr. B. F. STOCKS and Miss M. ALICE PARGEON were married December 23d.

SOUTHERN ILLINOIS NORMAL.

The closing examinations of the first term took place on Thursday and Friday, the 9th and 10th of December. The written examination and oral each occupied a day. The papers show steady improvement, and the interest felt by friends of the Institution was shown by a large attendance upon the oral field day.

A course of public lectures will be given in Assembly Hall of the Normal, by distinguished platform orators, under the auspices of the Zetetic Society. The first of the course, which is to include at least four lectures, will be delivered by the celebrated Arctic explorer, Dr. Isaac I. Hayes, on the evening of Dec. 20th. Much credit is due the committee appointed by the society, consisting of Mr. Geo. W. Graham, Miss Mary Wright, and Messrs. Roberts, Thompson, Kane and Caldwell, for their energy in disposing of the number of season tickets necessary to make the project a success. We are glad that their unselfish efforts have met with so generous a response from students and citizens. In the bright lexicon of this society, "there is no such word as fail."

The new society has been christened "The Locratio," and is already in the full tide of success. Though less than two months old, it has offered to break a lance with its more pretentious rival. The offer has been accepted, and the rules to govern the contest published. The public have been invited to witness the dialectic fray. Messrs. Kane and Thompson are to sustain the honor of the Zetetic, while Messrs. Ridenhouer and Robinson are the chosen champions of the Locratio. "Expectation is on tiptoe," and the occasion promises to be unusually interesting. It is to be hoped that the young gentlemen will not "darken counsel by words without knowledge," and "fill their bellies with the east wind," but will favor us with well digested arguments expressed in a direct and manly way.

The Y. M. C. A. of this place, have furnished comfortably a room in Chapman's new block, and regular meetings are held weekly. The latest periodicals are to be found on their table.

The death roll of our Normal numbers two names. Miss Matilda Blair, an earnest young woman, who, during her attendance here, discovered many traits of character which endeared her to her classmates, and won the respect of her instructors, died very suddenly at her home in Randolph Co., during the summer vacation. To her name has lately been added that of Mr. Daniel W. Hartwell of Marion. His fellows speak of him "As a young man of the gentlest disposition, and of the finest and noblest principles."

Prof. Foster has lately received from Philadelphia a barometer of the most approved pattern, and now believes that he can double discount "Old Probs" himself in prognostication of the weather. Dr. Thomas, State Entomologist, has been forced to vacate, temporarily, his room in the Mansard story of our building, on account of the cold. The pupils under the instruction of Mrs. Nash, teacher of penmanship and drawing, are earnestly at work, that specimens of their handiwork may be considered worthy of a place in the Centennial Exposition.

OFFICIAL.

CENTENNIAL EXPOSITION.—EDUCATIONAL REPRESENTATION OF ILLINOIS.

To the County Superintendents, Teachers, and other friends of Education :

At a meeting of representative educators of Illinois, held in the city of Chicago on the 19th day of November, the following report of a committee appointed at said meeting, was unanimously adopted :

"Your Committee on Finance respectfully report that properly to represent the educational progress and condition of our State in the Centennial Exposition, \$10,000 should be raised, that nothing should be asked from the State Board of Centennial Commissioners, and that an appeal be made through the county superintendents to the teachers of the State to raise that amount. That the details of the manner in which this shall be done be referred to the State Superintendent of Public Instruction with an association of two gentlemen to be appointed by himself."

In accordance with the above report, the undersigned were appointed a committee to prepare a circular letter, to be addressed to the friends of education throughout the State, setting forth the needs of the educational department of the Illinois contribution to the exposition, and indicating ways for raising the amount of money named in the report.

It is certainly a matter of the utmost importance that our State should be properly represented in the exposition in every department, and especially in that of education.

Illinois is now in point of population the fourth state in the Union, and soon will be the third. In wealth, intelligence and political influence her standing is at least equally high.

Her appearance at Philadelphia ought to accord with her real position among her sisters. Her citizens, surely, ought not to endure the disgrace of a meager and unworthy representation upon the hundredth anniversary of the national life. And where shall Illinois be most jealous of her fame if not in the representation of her educational progress and labors? Who among her citizens shall be eager to do her justice if not the teachers and friends of schools?

In this enterprise the legislature has not rendered us a particle of aid. The pittance appropriated for the centennial at the last session will be all needed in other channels. The friends of education must do all, must contribute every cent of the necessary funds, or they will not be contributed, and without these funds, to the amount named at least, in the report above given, ten thousand dollars, the schools, colleges and indeed all our educational institutions and enterprises will be unrepresented at Philadelphia; Illinois will, in this case, count for no more than an equal area in the great American desert.

HOW SHALL THIS MONEY BE RAISED?

1. Every county superintendent is earnestly solicited to make a vigorous appeal to the teachers and people of his county, and to secure from them an amount of money that shall be creditable alike to their liberality and patriotism. Let every teacher be urged to contribute of his own means and to collect from his pupils such sums as they are able to give. Meetings may be called in the different towns and school districts, and a public interest thus be awakened.

2. Every teacher is invited to make this a personal matter. Do not wait too long for the county superintendent, but in some way set the enterprise in motion at once. If every person now actually engaged in teaching within the state were to contribute one dollar, the amount would be fully made up.

Let the pupils in all schools be urged to contribute liberally.

3. Money can be raised in large amounts by means of school exhibitions in each school district by charging a small admission fee.

4. A revival of the spelling fever might be successfully attempted in many portions of the State. Spelling contests between schools of different districts are suggested.

Many other expedients, some of them doubtless better than those herein suggested, will occur to such as are willing to enter heartily upon this work.

All moneys collected may be remitted directly to the State Superintendent of Public Instruction, at Springfield, or indirectly through the county superintendent, by post office order, draft or express.

Circulars giving full information concerning the educational part of the exposition for the State of Illinois, will soon be prepared and distributed by the Superintendent of Public Instruction.

RICHARD EDWARDS, Pres. Normal University, Normal.
J. M. GREGORY, Pres. Ill. Ind. University, Champaign.
S. M. ETTER, Supt. of Public Instruction, Springfield. } Committee.

DEPARTMENT OF PUBLIC INSTRUCTION. }
SPRINGFIELD, ILL., December 13th, 1875. }

In consideration of the great importance of this enterprise I feel impelled, in addition to what the committee has already said, personally to urge all the county superintendents and teachers in the state to begin the work at once, so that the necessary means may be forthcoming in time.

The exposition will open in the near future. Whatever is done, must be done quickly and promptly. Let there be no delay on the part of superintendents or teachers. In this enterprise there is an opportunity for a laudable spirit of emulation that can occur but once in a century. What superintendent, what teacher, what school, what town or county will show the best results in the shortest time? With the amount mentioned in the resolution, the school interests of the State can be creditably represented; without it, any attempt must result in failure and disgrace before all civilized nations. The committees on the different topics assigned are now at work upon the details for the representation.

Ample space is secured in the exposition buildings, all the necessary preparatory plans are being carried forward; but their success or failure depends entirely upon your response to this appeal.

The amount asked is so small that divided amongst the millions of the State, the individual will not feel it; but every man, woman and child would deeply feel the shame and disgrace to the commonwealth, if what is done in this department at Philadelphia next year is not well and thoroughly done. The plan proposed makes this pre-eminently the work of the teachers. Having, without help from any source, made a creditable exhibition, all the honor will belong to them alone.

It is hoped much may be done before the meeting of the State Teachers' Association at Rock Island, on the 27th inst. In any event let all who are in attendance upon that meeting be prepared fully to discuss the plans already proposed, or to suggest such as will most effectually accomplish the desired result.

S. M. ETTER, Superintendent of Public Instruction.

REV. HORATIO B. HACKETT, D. D., Professor in the Rochester Theological Seminary, and a well-known author, died suddenly at his home, early in November. He had been tutor in Amherst College, and Professor in Brown University, and in Newton Theological Seminary. His age was about sixty-seven.

PERSONAL.

The many friends of Mr. JAMES BLODGETT, Principal of the West Side Schools in Rockford, will be pained to know that his eldest child, Anna E., died on the 4th of November. She was in her fourteenth year, and died of rheumatic heart disease, after a painful illness of nearly five months. We know we speak for many others as well as ourselves, when we tender to the afflicted parents our sincerest sympathies.

Rev. ISRAEL WILKINSON, formerly Principal of schools in Jacksonville and in Lincoln, is now teaching at Clinton, Illinois; and we hear good reports from his work.

BOOK TABLE.

Model Arithmetic; a complete, thorough and practical course, including oral and written work: by ALFRED KIRK and HENRY H. BELFIELD. Chicago: GEORGE SHERWOOD AND COMPANY. 359 pp.; price, \$1.00.

The appearance of this little book is extremely creditable; the paper is thin, but very smooth and firm; the print, clear and almost perfectly accurate; and the binding, tasteful and strong. We call the book a little one; but it treats of all the topics usually found in such books, and we think some might be omitted without loss. Besides, there is an unusually large number of examples, and they are excellent in character. Among the things we notice to commend, are:

1. The judicious combining of oral with written work.
2. The large number of well-chosen and well-arranged examples.
3. The clear explanations of business papers and business transactions.
4. The full and correct statement of *principles* in the fundamental rules.
5. And the generally excellent character of the analyses and explanations.

We are glad to find here an explanation of the *Metric System* of measures and weights, and of the Land Surveys of the Western States. The definitions are usually brief and accurate, but we object to the definition of Compound Denominate Numbers, and we think the definition of Ratio can be improved. We are sorry the authors seem to have forgotten the principles of the fundamental rules, occasionally. We commend the explanation of Subtraction, on p. 23; of Division, on pp. 34, 35; and the manner of introducing Percentage.

We object earnestly to the use of "ten-fold," "thousand-fold," etc., in the elementary lessons; also, to such statements as "multiply figures," "the sum of the digits," etc. Why confound things with their symbols? Our authors have discarded a good deal of the nonsense that has disfigured our Arithmetics so long; why did they not omit the second, senseless method of finding Least Common Multiple? We think the explanations for the Multiplication and division of Decimals may be much improved; and we very much question the utility of "Cause and Effect," "Inverse Proportion," and the distraction of "cases" in Percentage.

On the whole, we regard the book as excellent,—a credit to the authors and publishers; and an indication that the West need not always be dependent on the East for its text-books.

What Young People should know. The Reproductive Function in Man and the Lower Animals. By BURT G. WILDER. Boston: ESTES & LAURIAT.

The distinguished author has put into a book of two hundred pages what is usually found only in the large volumes upon the shelves of the physician's library. He treats the subject in the most candid and thorough manner.

A careful perusal of these pages will teach the young what they may otherwise learn in the sorrowful school of experience. Far better that they should study the inflexible laws of nature from the pages of this little book than from the disordered functions of their physical natures.

Felter's New Intermediate Arithmetic. New York: SCRIBNER, ARMSTRONG & Co. pp. 258; price, 80 cts.

This book treats of the "Ground Rules," Decimals, Fractions and Denominate Numbers. It has many things in its favor; the paper, print, binding and cost leave little to be desired in these respects. There is a great abundance of work for the pupil, which judiciously combines both the oral and written forms. The illustrations are both beautiful and instructive. We also commend the introduction of copious Review Questions, all through the book.

We object to the use of "ten-fold," "one hundred-fold," etc., in Notation. The expression, "For Convenience," so frequently occurring has no meaning whatever. There is constant confusion of figures and numbers. The explanation of Subtraction is not the best. The correct principles enunciated on p. 60, are violated over and over again, as on p. 206, etc. The usual, stupid method of finding Least Common Multiple appears on p. 117. We think it better not to explain Decimal Fractions by reference to Common Fractions; and we would have pupils constantly trained to read and use a "mixed decimal" as a simple number. The book contains very few answers; this feature, we commend very highly.

Graded Examples; including Key to the Same: by HENRY H. BELFIELD, Chicago: GEORGE SHERWOOD & Co.

This little book, of 32 pp.; price, _____; contains in a very compact and ingenious form, more than 5000 examples in the elements of Arithmetic. Any teacher ought to be able to use it, with excellent results.

Elli's Popular Encyclopedia and Universal Dictionary. Edited by L. COLANGE, LL. D. Philadelphia: BAKER, DAVIS & Co.

This fine work is now being re-issued in monthly parts, having been thoroughly revised. Some two hundred pages have been added, and the whole will be complete in sixty-four parts at fifty cents each.

Numbers one and four inclusive are before us, and there is little danger of commending them too highly. The amount of information they contain is wonderful. The cuts are very numerous and are excellently executed. The type is small but clear, and the pages present a fine appearance. Fine colored maps have been added, which materially add to its value as a reference book in geography. The portraits of distinguished men are numerous and good.

At a small outlay teachers can supply themselves with this vast storehouse of information. School libraries, that cannot hope to secure the larger encyclopedias, will find here about all they need in this line of reference books.

The general agent is J. W. Marsh, 615 North Fifth St., St. Louis.

The School Hymn and Tune Book. By J. D. Banley, A. M., A. S. Barnes & Co., Chicago and New York, 1876.

We are very much pleased with this little book. It is just what we have been looking for for some time. The hymns are the very best, and are chiefly non-sectarian. The music is largely old tunes—for which we feel like thanking the author—that find a place in every first-class book of devotional songs. We have been asked many times for information respecting a suitable work for school devotions and we unhesitatingly pronounce this the best that we have seen. Price 50 cents.

Astronomy, by J. NORMAN LOCKYER, New York: D. APPLETON & Co. 120 small pp., illustrated; limp covers; price, 50 cents.

This is one of Appleton's series of *Science Primers*, and is of course written in very simple style. We are sure it may be very helpful to such teachers as have no time or opportunity for a larger and fuller work on the subject. The shape, circles, movements, and seasons of the earth are explained; this is followed by an outline of the solar system, together with some facts about the stars. The author is an acknowledged authority respecting the subject on which he writes. We note a few points with disapproval. Are *March 22d*, and *Sept. 22d*, the times of the Equinoxes? pp. 28 and 29. Are *circles* divided into degrees? p. 51. Is the density of the earth $5\frac{1}{2}$ times greater than that of water? p. 55. Do the interior planets present the *same changes* as the moon? p. 58. How can a *point* have an inclination to a *plane*? p. 70. Do *circles* *bell* the earth? p. 111. Notwithstanding these defects, we highly recommend the book to those for whom it was designed.

BUSINESS ITEMS.

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Have you ever seen a perfect *Eraser*? Have you tried the "Magic"? The "Improved Magic"? The "Triangular"? The "Reversible"? The "Common-School"? The "Higgins"? The "Common Wool"? Have you found any of them satisfactory? Don't the handles of the "Adjustable" and "Reversible" get loose? Don't the carpet gather dust when new, and wear smooth when old? Is not the wool intolerably dusty? Have you become entirely disgusted? Are you willing to try another? Something new? cleanly? cheap? durable? Did you ever see an Eraser with a surface near $\frac{1}{2}$ inch in thickness, made of hair and wool in such proportion that it will neither wear smooth or get dusty? An Eraser lighter than any other? cheaper than any other? cleaner than any other? In short, did you ever see the JAPANESE ERASER? If not, don't you want to? Don't you want to try one? If you do, won't you send us 25 cents for a sample? Price, \$2.50 per doz.

Respectfully,
HADLEY BROTHERS & KANE,
School Furnishers, 63 & 65 Washington St., Chicago.

LITTELL'S LIVING AGE FOR 1876. In no other way can so much of the best work of the best minds of the time be obtained so cheaply or conveniently, as through this standard eclectic weekly.

In 1876 it enters upon its thirty-third year, having met with continued and increasing success, and being now, since its absorption of "*Every Saturday*," practically without a rival in its field. With its weekly issue, and its *three and a quarter thousand* large pages of reading matter a year, it is enabled to present with a freshness and satisfactory completeness, attempted by no other publication, the ablest essays and reviews, the choicest serial and short stories, the most interesting sketches of travel and discovery, the best poetry, and the most valuable biographical, historical, scientific and political information from the entire body of foreign periodical literature. It would be difficult, therefore, to over-estimate its importance to American readers as the only thorough compilation of an indispensable current literature,—indispensable, because it embraces the productions of the foremost living writers in science, fiction, history, biography, theology, philosophy, politics, criticism and art.

Such distinguished authors as Hon. W. E. Gladstone, Prof. Max. Muller, Prof. Huxley, Dr. W. B. Carpenter, Prof. Tyndall, R. A. Proctor, The Duke of Argyle, Edward A. Freeman, Frances Power Cobbe, Jas. Anthony Froude, Mrs. Muloch, Mrs. Oliphant, Miss Thackeray, Jean Ingelow, Geo. MacDonald, Thomas Hardy, Wm. Black, Anthony Trollope, R. D. Blackmore, Mrs. Parr, Julia Kavanagh, Mrs. Macquoid, Matthew Arnold, Henry Kingsley, Thomas Carlyle, F. W. Newman, W. W. Story, Robert Buchanan, Tennyson, Browning, etc., etc., are represented in its pages; and during the coming year, besides the best fiction by the leading foreign novelists, it will give the usual amount, unapproached by any other periodical, of the most important literary and scientific matter of the day, from the pens of the above named and many other ablest living contributors to current literature.

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The volume begins Jan. 1st, and to new subscribers, remitting now, the publishers (Littell & Gay, Boston,) offer to send the intervening numbers *gratis*.

ILLINOIS TEACHER, }
Volume XIII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

FEBRUARY, 1876.

NUMBER 98.

ADVICE TO BEGINNERS.—V.

The opening ^percises of the daily programme should be for the moral culture and refinement of the pupils; not, as is often the case, of a trivial and irreverent nature.

It is not the province of this paper to discuss the "Bible question," but, since the book is found in most of our country schools, to make a few suggestions as to the use of it.

When there are several good readers among the pupils in a school, it is well for the teacher and such pupils to read alternate verses of selected passages of the Scriptures. It is not always best to read continuous chapters for the term, nor is it generally well for the pupils singly to read consecutive verses. When, as is often the case, pupils will mutilate the language while reading, the teacher had better read alone. There should be a reverence for the Bible and its teachings, and it had better not be read by pupils in a school, than to be used thoughtlessly or irreverently. Occasionally the teacher can select passages very applicable to the circumstances of the school, and which will leave lasting impressions for good upon the pupils. It is well to read some carefully selected passages quite frequently, that the pupils may learn them and the truths they contain. When learned, the passages can be recited at times by the pupils in concert, the Bibles not being taken from their desks. Sometimes the teacher can call upon a pupil to stand and repeat a verse previously given to the school, the first word of which commences with the letter A. Other pupils can then be called upon for most of the other letters of the alphabet. In this way, in a short time, a goodly number of choice selections may be taught to the pupils, old and young. If *extempore* prayer is offered, it should be brief and fervent, and should command the attention of the pupils. When the Lord's Prayer is repeated by teacher and pupils in concert, it should be with due rever-

ence, and in such a manner as to present the thoughts of the words repeated. The singing in these opening exercises should be of a devotional character, and not of the trivial and unrefining nature often heard in our schools. The singing at the opening of the school in the afternoon may be of any other kind that will improve the pupils in their knowledge of music, and elevate them in desires and morals.

One recess each half day is given in the programme. This is the usual custom throughout the country. In some cities short recesses, hourly or half-hourly, are given with good results. If the conveniences and surroundings of the school-house are not what they ought to be, as is too often the case, it will be well to let the girls pass from the room five minutes before the boys are allowed to go, and to call the girls into the room five minutes before the boys.

I deplore the condition of society that will tolerate such nuisances as are found almost everywhere, in the surroundings of our country schools, and very many of our town and city schools, and that will doom innocent and shrinking girlhood to such terrible influences. I appeal to the teachers and parents of our country in the name of all that is decent, virtuous and humane, to bring about the much needed reform in this regard.

The features in which country and city schools respectively excel, the several particulars in which country schools can be made better, the hindrances and remedies, will all be discussed in future papers.

The province of these papers at present, is to give a course of study for an average country school, and to give some suggestions as to the ways of developing each branch of study in the course.

The course of study will conform to the programme given in the last paper, hence there will be four grades in the course. It may sometimes be necessary to make two sections, A and B, of grade one, on account of young pupils entering school as beginners, when the other younger pupils have not passed into grade two. When this is the case, it need not disturb the general plan, for the work can be assigned and the programme arranged to suit the circumstances of the school. If two such sections shall be formed, the work for each may be as given below, and if but one class is necessary for the first grade, the work will of course include what is given for the two sections.

FIRST GRADE.

(Section A.)

Reading.—Fifty chart or blackboard words from First Reader.

Spelling.—Orally, all words read. By sound, the simplest words.

Writing.—On slates, all words read.

Numbers.—Counting objects and writing numbers to 100. Roman to

X. Adding ones and twos, each sum 20 or less.

Language and objects.—Such exercises as pertain to the teaching of the 50 words from First Reader.

(Section B.)

Reading.—First Reader.

Spelling.—Orally, all words read. By sound, the words of difficult pronunciation.

Writing.—On slates, all advance reading lessons.

Drawing and Printing.—Assigned lessons.

Numbers.—Writing and reading numbers to 1,000. Roman to C, or the number of lessons in First Reader. Adding units mentally and on slates, each sum 100 or less. Adding on slates, units, tens and hundreds, each sum 9 or less. Addition and subtraction tables in full.

Language and objects.—Such exercises as pertain to the thorough teaching of the former subjects of this grade.

Now prepare to answer satisfactorily to yourself the following questions:

1. Does the Constitution of the United States contain any direct reference to the Supreme Being?
2. Is the name of the Deity used in the Constitution of Illinois? If so, in what connection?
3. Does the school law of Illinois contain anything in reference to the Bible in the public schools?
4. Has a board of directors or a teacher the legal power to make a rule compelling pupils to read the Bible in school?
5. Has a board of directors the legal right to exclude the Bible from school, when the teacher or pupils desire to retain it?
6. Name five objections urged against the use of the Bible in public schools.
7. What are the answers to these objections?
8. Who has the controlling power as to the times and length of recesses; the board of directors or the teacher?
9. Has a teacher the legal right to retain a pupil at his desk during recess for misconduct, or negligence in study?
10. Has a teacher any legal control over his pupils outside of the school premises, morning, noon, or evening?

E. L. WELLS.

HISTORY.—I.

While human curiosity continues to be insatiable, the study of History will be one of the most interesting subjects that can engage the intellect of man. The prospect is that this will always be the case, for curiosity is one of the earliest aroused of the motives. It prompts the infant in all its attempts to gain a knowledge of what is in the world, and has led to the triumphs of science. The mother of James Watt little understood the thoughtful curiosity that led her son to experiment with the cover of her tea-kettle, but those observations on so small a scale led to some of the most useful of the modern applications of steam. While one mortal has any interest in his fellow-creatures who have gone before him, History cannot be forgotten. So far as it is merely a gratification of curiosity, it becomes only gossip on a large scale, but the experience of the world seems tending to refute the old notion that gossip is a species of entertainment peculiar to the feminine mind. But why should any one be ashamed of gossip? It is indeed prompted by curiosity, but that, instead of being an ignoble motive, has noble qualities, such as courage and perseverance, for the stumbling-blocks in its path serve not to discourage, but to arouse it to renewed efforts.

Pride of ancestry seems inborn in races as well as in individuals; each successive race considers itself the aristocracy of the earth. The Greeks, with some reason, called all other people barbarians. The Romans were troubled with no doubts as to their position as rulers of the world. England, Germany, France, each considers itself the first country of Europe, and it is doubtful if Russia would accept the rank of second without remonstrance; while the boastful disposition of America is too well known to be denied, and the whole Anglo Saxon race unanimously concur in announcing themselves as destined to be dominant over all the globe. Far be it from us to dispute this; we will of course admit it to be a glorious fact. Every nation seems to feel a perfectly natural desire to know its own origin, and how it has become what it is. Going back to Father Adam as a common progenitor does not seem quite satisfactory, particularly in the olden time. National vanity sought to be gratified by finding some illustrious ancestor, not so far back as our first father, who produced that race alone, no other people having any claim to the glory of such a descent. For lack of accurate information, many astounding fables were told, either the deliberate invention of poetic imagination, or a fanciful rendering of facts ill understood, but at all events unhesitatingly adopted by succeeding generations who, the more impossible their origin was said to be, the more implicitly and proudly believed it. The dragon's teeth sown by

Cadmus, that sprung up armed men, and the stones cast backward by Deucalion and Pyrrha after the depopulation of the world by a deluge, were an ancestry not to be ashamed of in the ancient times, while the majority of the older races claim a descent from their deities.

In the middle ages, when classical lore was the only literature known in Europe, a descent from the classical heroes was invented for nearly all the prominent nations of Europe. We find it stated that Paris was named from Paris son of Priam; that the Britons were descended from Brutus, son of Æneas; and the Franks, from Francus, son of Hector. All the wisdom of the moderns, while contemptuously rejecting these fictitious genealogies, has not been able to substitute anything certain, even though much more probable. In fact the origin of nations seems to be what Lord Dundreary would call "one of those things no feller can find out."

But we, school teachers, not worthy perhaps to class ourselves in the "noble army of martyrs," though we do really endure many tribulations because of our profession, cannot amuse ourselves with these attractive parts of history, simply as a literary entertainment; we have sterner work to do; instead of regaling ourselves with the freaks of fancy of generations almost buried in oblivion, the mental wants of the rising and future generations must engross our thoughts.

Though the gratification of even a natural curiosity furnishes the needful stimulus to the study of history, a noble motive is found in the desire of benefiting the posterity of nations, by teaching wisdom from the misfortunes of their ancestors.

This can be done with safety and certainty only when the laws governing history are understood, for it must have laws, like any other science; the difficulty is to find them. Unfortunately these laws even when traced with apparent correctness, are not susceptible of experimental proof as in other sciences. For instance, the laws for falling bodies, or for the pendulum, can all be visibly demonstrated so that it is impossible to doubt, but concerning depreciation of currency, or how far religious toleration is advisable, the wisest heads frequently disagree: and when doctors differ, who shall decide, the proof not lying within the power of any of us?

Another great obstacle to correct views of antiquity, is the propensity of historians for accumulation. When the confusion of names that existed in days of old is considered, the mighty deeds of some heroes are partially accounted for. Let any man of our day be credited with the accumulated acts of forty or fifty even very ordinary mortals, and his achievements would certainly appear superhuman. Varro mentions no less than forty-four individuals named Hercules, yet one person is commonly considered as having

performed all the great deeds connected with the name. The same is the case with Sesostriis, and many another conqueror who should rightfully be compelled to divide his honors with those perhaps equally deserving.

For interpreting the old Greek myths, allowance must be made for their style of narrative. Were some of the well known achievements of Benjamin Franklin or Cyrus Field to be adorned by Greek poetic imagination, they would appear far more miraculous than the labors of Perseus or Hercules. Who knows indeed but that the daring act of Prometheus in bringing fire from Heaven was similar to the experiment of "Poor Richard," when he bottled the lightning? This fondness for making astounding statements by no means died out in the days of the ancients, for we find in England, as late as the middle of the twelfth century, a reverend arch-deacon, when relating the early history of Britain, gravely telling of a giant, vanquished by Prince Arthur, who wore furs made of the beards of the unfortunate kings whom he had killed.

Much of the history of the infancy of European countries is preserved in their popular ballads, but the events so recorded are by no means to be taken as reliable history, for it requires a somewhat stern sense of integrity to relate the history of facts for the amusement of a credulous and admiring audience, and not embellish or exaggerate; and when these ballads were transmitted orally from generation to generation, their chief value consisted in the pictures of times which they represented. The ballad of the "Jew's Daughter," relating the cruel murder of little Hugh of Lincoln by a Jewess, simply because of her hatred of Christians, gives a scarcely too highly colored picture of the enormities attributed to the unhappy Israelites, though there is not the slightest evidence that any of these crimes were ever committed by them.

While some of the old historians are known to have displayed an absurd credulity, others share the fate of the ballad-makers, and are proved to have misrepresented facts, and that too, without the excuse of poetic license. With others, the judgment is reversed. Herodotus is found to be more accurate the more he is understood. A good proof of his truthfulness is that he states on the authority of others, what he avers he himself finds it impossible to believe. Phœnician navigators, claiming to have doubled the southern cape of Africa, declared that they saw the sun on their right hand, but this appearing to him quite incredible, he takes care to give it on their authority, not his own.

M. A. WAIT.

BEYOND.

Do the angels laugh. I wonder,
At us in our puny might,
Striving to pierce the darkness
That veils our human sight,
And claiming, when a sparkle
For a moment lights our way,
That the shades of night have vanished,
And left us perfect day?

Beyond our earthly vision,
Dwells Truth in regions bright;
And we, through mists of error,
Are reaching for her light.
But, as we journey onward,
The shadows darker seem,
Our boasted light fast changes,
Like fancies in a dream.

The soul is ever longing
For something yet afar,
Some glory that awaits it
Bright as the morning-star.
And never in this earth-life
Can we that glory see,
But in the distant future
It waits for you and me.

Life's problems are too many
To solve in this short day,
We weary of their study,
And falter by the way.
But in a time that's coming,
Beyond this life so fleet,
To all our vague conjectures
Shall we find answer sweet.

MARY TORRENCE.

SOME OF THE THINGS WE SHOULD TEACH.

1. *We should teach politeness.*

The tendencies of our republican theories and practices are to make our children too little mindful of the respect due to each other, or even to their superiors, and I think that some of the wholesome training of the Prussian school teacher would be of great benefit. They have the oversight of their pupils even while upon the street, and politeness and respect toward their elders are rigidly enforced. The American youth, however, goes hooting along the street as unmannerly as the boor from the mountains; and from the pupils of all ages and of all ranks of society, the teacher not unfrequently receives the blunt response of "yes," "no," or "what:" or, upon the street is greeted with the salutation, "hullo," or "How are you?" by the little urchin with his sled, or by the awkward boy of fifteen or sixteen. It has long appeared to me that we, as teachers, were sadly negligent with respect to the proper teaching of this virtue. I have noticed often that the teacher who gave careful attention to his *own* manners in his intercourse with his pupils, and who kindly, but firmly, insisted upon the proper observance of the rules of true politeness by them, other things being equal, succeeded much better than the careless and the boorish. I do not wish to be understood as recommending a fawning sycophancy or a simpering silliness. True politeness is as far removed from this as it is from the uncouth manners of the clown. The old-fashioned bow and courtesy of a hundred years ago were far better than the disregard of any form of politeness, which is too common now.

2. It is the special duty of the teacher to instill into the minds and hearts of his pupils the principles of

TRUE PATRIOTISM.

It is a recognized principle of our statesmen, and has been since our nation's birth, that the Public Free School is the safety of the republic, and not unfrequently we see the motto paraded upon banners and at national gatherings, "Our Public Schools—the Palladium of our Liberties." If the children are taught the true love of country, then the motto is *true*, but if *not*, if they grow up ignorant of the principles upon which our government is founded, if they are not instructed in their duties as citizens of a republic, they will be very likely to grow up mere partisans, or communists, and wholly unfit to guard the heritage bequeathed to us by our forefathers.

3. Again, we should teach

OBEDIENCE, —

prompt and unquestioning obedience. A teacher lax in discipline, is doing

incalculable injury to the locality in which he may be laboring. There is enough and more than enough of loose discipline in the families of our land, and it becomes the imperative duty of the teacher to counteract the baneful influence of these practices, and teach loyalty to law. Are lawlessness and crime on the increase, or is it because newspapers and the telegraph herald all the crimes committed, that these monsters seem to stalk forth through the land? If these are increasing, it is a sad comment upon our civilization, and impeaches our systems of education and of religion, and lays upon the teachers of the nation a mighty responsibility. If pupils leave our schools with a disregard of law and justice, and enter the arena of strife with no fixed and settled principles of loyalty, when the avenues of crime and dishonesty are so wide open, we can have little hope of a loyal manhood or an honest life.

4. In addition to the matters already mentioned, we should teach

MORALITY.

I am aware that this part of our work has caused much discussion, and that a certain class of politicians claim that we have no right to teach anything but what is purely intellectual, and must ignore entirely the moral part of a child's nature. The *New York Evening Post* had an article, only a short time ago, in which the editor boldly asserts that the teacher has nothing to do with teaching morals or religion. This may be true with regard to the latter, but that we are to pass over the child's moral nature entirely, I cannot accept. A person educated in utter disregard of that part of his being, would be a monstrosity. It is claimed, however, that moral instruction should be left to the church and to the family, and should always be considered an intruder when found in any system of public-school instruction, that the schools were simply instituted for the diffusion of that degree of intelligence which is necessary to the citizen to enable him to discharge his fundamental duties as a citizen. We all admit that this was the leading idea in the establishment of our free-school system, but that the prominence of this idea utterly prohibits the teaching of morality does not necessarily follow. Our national constitution asserts that the enumeration of certain rights does not prohibit the exercise of others justly implied. When, therefore, it is claimed that our free schools are designed to prepare our boys and girls for the discharge of their duties as citizens, it means that we should teach them something more than the mere processes of reading, writing and computation. It implies that we should teach them how to make use of this knowledge for the highest interest of the nation. It is true that the family and the church ought to do this work, but we know, too well, that they fail to do it. The church, with its various departments of christian labor, is do-

ing a grand and noble work, but the church with all its expenditures of labor and money fails to reach, with any great degree of success, even a majority of our population, and we know how sadly religious and moral instruction is neglected in multitudes of families. And more than this, in thousands of families the influence of home is decidedly pernicious, and the parents are averse to anything in the least leaning towards or reflected from the church. Shall we then allow this influence to move unchecked amid the depraved natures of children, and roll on and on till our nation becomes a nation of infidels, and the foundations of justice are undermined? In spite of all that is being done now, the corruption in high places calls for a firm foundation of moral principles in the child, that when the present generation of children shall assume the responsibilities of citizens and office-holders, there may be purity at the ballot-box and integrity in office.

The duties of citizenship, however, are not all included in the one act of depositing a ballot. This is one of our high prerogatives, but there are other duties which we owe to the state, and which can be performed properly only when done under a sense of high moral obligation. We are all born members of society, and as the state is but organized society, whatever duty we owe to one, we owe to the other: and it is the duty of the state to see that her citizens are fitted to perform their duties wisely, and so as to minister to the highest public good. This cannot possibly be done unless there be sound moral culture. The past furnishes abundant illustrations of the fact that an immoral constituency is the ruin of any nation. It seems to me that our duty is plain in this matter. We ought always, when any occasion demands, to crush in its incipency everything bordering on vulgarity or profanity, and to instill principles of purity and reverence; to check falsehood whenever seen, and to teach strict adherence to truth in word and deed, and an abhorrence of deception in any form. We ought to correct any tendency to disregard the rights or property of others, and to show that the principle is the same whether the money value be great or small, and that the enormity of the offence is not of so much importance as that there was any offence at all. Occasions for these corrections and counsels are occurring in our school-rooms and on our school-grounds every day, and these occasions should be used for the teaching of morals, rather than any set time for a lecture on moral science. My own experience has been that profanity and deception are the two prominent phases of immorality among school-children. There is a very erroneous and mischievous state of opinion, especially on the question of deception, in the minds of boys and girls at school. A boy who would scorn to steal the smallest thing, or to misrepresent in the slightest degree any where else, will make no scruples of deceiv-

ing a teacher. He seems to hold a false notion of right. Honesty is not confined to time or place; what is dishonest in business life, is none the less so in school life, and these *little* deceptions—if we can grade these offences—tend to blunt the moral sensibilities, to impair the sense of personal honor, and to lead by easy steps to that grosser cheating which shocks the community and ends in the penitentiary. When, therefore, personal, social and national interests, unite to urge upon us the obligation to teach morality, it is the height of absurdity to claim that this is foreign to our legitimate work.

E. C. SMITH.

"HE CALLED ME A LIAR."

The little wood-colored school-house was mounted on pegs, as if on tip-toe to catch a glimpse of the unusual scene. The autumn days were shortening and the "sere and yellow leaf" was winging its zig-zag flight from the almost naked boughs to the earth. It was the afternoon recess. Upon the play ground, the ordinary games were abandoned, and the boys had rushed with one accord to a corner of the yard where a youthful Hector and Achilles were engaged in mortal combat.

The average boy has an exaggerated, but peculiar, sense of honor. This terrible encounter, which was thrilling all the remnants of our inherited barbaric natures, was an affair of honor. No chivalric gentleman of the olden time ever gazed across ten paces into the ominous muzzle of another chivalric gentleman's pistol, with a keener appreciation of the demands of the code, than had these two boys who were valiantly tugging at each other's hair.

The teacher's bell put an unceremonious end to the sanguinary conflict, and we reluctantly marched to our customary places in the school-room.

The troubled face of the teacher showed that he had been an unwilling spectator of the duel. No anger was manifested in his kindly countenance, but it was evident that the affair caused him more pain than he could well express. Nothing was said, and the afternoon classes were soon at their customary "twice nine is eighteen," or "John is a proper noun, masculine gender, etc." The faces of the combatants began to lose their sullenness, and the hard lines slowly faded away. At last, four o'clock made its tardy appearance, and expectation was alive. The teacher was a new-comer. The traditions of the school had never been violated. From the remotest period there had been fights, and the traditional flogging of both was of course expected.

The boy who could vindicate his honor on the play-ground, and take his whipping without a tear, was a hero : it was a glory for us smaller boys to be on familiar terms with him. Even the lad with a bloody nose who stoically accepted his inevitable share of the punishment, was but a lesser hero.

"Books aside!" When the rustle of leaves and the thumps of sundry slates had ceased, we sat with beating hearts to see the result of the fray.

"Well, John, what was the trouble?"

"He called me a liar, sir, and I struck him," said John,—and his face flamed with passion. John's air of defiance plainly said, "And I did right, sir, and you can punish me if you wish, but I will do the same thing again under the same circumstances."

Mr. G. understood the look. "And were you a liar, John?" "I, a liar, sir? Why—why, no sir," with some hesitation.

"Then why did you strike?" "Why, sir, I allow no one to call me a liar," responded John, hotly.

"I do not quite understand your reason, John. If you *had* told a falsehood, it would be exceedingly discourteous, to say the least, on William's part to have told you so in such a positive way, and he would have been guilty of a breach of good conduct that must have lowered him in the estimation of all good people, while you would have but made a bad matter worse. If you were not guilty of falsehood, then William was, and you made yourself a fellow law-breaker by striking him. If a man should so far forget what constitutes gentlemanly conduct as to call me a liar, I should be showing too much respect for his opinion if I resented it."

This view of the case was new to John, and he could but feel that in the eyes of his fellows he was, in some mysterious way, losing the glory of the occasion.

"He who is right needs no such vindication, John. Let's leave the fighting to the brutes. Will you be happier with the consciousness that you have been the slave of your temper, that you have set this sad example of wrong doing before your mates, than you would have been in the thought that you were right, and that you had overlooked the coarseness of another? The *gentlemen* are what their name implies. Then, boys, isn't there a better way, too, of adjusting your difficulties, than by a disgraceful exhibition of the worst there is in you? Did your fight settle the question of your honor? Think it over, boys. That's all. School is dismissed."

We went out into the still streets of the village a thoughtful group of boys.

Twenty years have slipped away, but that little speech has been imperfectly repeated to many a belligerent Young American, with good results.

I have forgotten whether Mr. G. taught me the mysteries of Long Division and Greatest Common Divisor, but I remember the lesson of that autumn afternoon, in the wood-colored school-house. J.

WHO SHALL ASK THE QUESTIONS?

I remember an old picture that used to hang in the sitting-room at my grandfather's—it was labelled "Jesus disputing with the doctors." Venerable men with flowing, gray beards and long, red and green gowns, were seated at different altitudes on semicircular benches that rose tier on tier like stairs. Below them, "in the midst," stood a youth, with his right foot forward, his head a little thrown back, his right hand raised high in the air and about to smite his left palm which was in position to receive the blow. Everything about the picture tended to express the idea of a heated discussion, in which the boy had the best of the argument and was making the most of his advantage. In after years, I read the story of this picture as given by St. Luke, and was much surprised at the contrast it made with the old painting. "They found him in the temple, sitting in the midst of the Doctors, both hearing them and asking them questions." Or, in a more modern phrase, in the school-house (temple) with the teachers (doctors) "hearing and asking questions." The beauty and truth of the real picture can scarcely be told. It images the ideal school, the ideal pupil, and the ideal manner of obtaining knowledge. The doctors, with all their gravity and knowledge, are for the child. He sits and listens to their expressions of wisdom and gathers instruction from their experience; and when a word is said which he fails to grasp, he "asks questions," till the point is made clear.

It has been my fortune, during the past two years, to visit many of the schools in Illinois, and my observation has led me to certain conclusions with regard to the present relations existing between teachers and pupils. There is a tendency toward the idea that children exist for the schools, rather than the schools for the children. The teacher is called "master," and the pupils are subject to him. He is "a man under authority," and he saith to this one go and he goeth (if he knows what is good for himself.) The teacher is now the one who does the "hearing and asking questions." The ideal is reversed. We hear recitations, and cross-question our pupils to the last limit. We seldom give our pupils a chance to listen to us, and almost never allow them to ask questions. My observation has led me to believe that there is too little real instruction at present given in our schools.

Teachers are doing less out-and-out teaching than they should. The teacher sends the child to the *text-book* for instruction, he acting the part of Inspector General whose business it is to see how much of said book the child has "taken in." The result is, pupils fill themselves with the words of the book, which are meaningless, unless made alive by the teacher. The instruction that ought to come from the teacher is omitted, and its place is filled with an endless questioning. Pupils are crowded over work that they know nothing of, that they do not understand, and have never been helped to comprehend. To be sure, teachers should sometimes question their pupils. But all questioning should be for the child's sake, and of such character as to fix the subject more firmly in the mind. I think it is safe to say that in the average school fully one-half of the time allotted for recitation should be given to instruction on the part of the teacher. This instruction should consist of full explanations, both as to the *how* and also the *why* of the matter under consideration. The "how" should be dwelt on till each pupil in the class is able to perform the work required; the "why" should be considered logically, yet simply, till it throws such light upon the "how" that neither "how" nor "why" can ever fade from the memory. And ever and always the pupil should be at liberty to "ask questions" on the points which he does not understand.

We teach our pupils to deceive by allowing them to pass over subjects which they have not mastered. They are credited with work which they are conscious they have never done, and thus a lie is fairly saddled upon them. The first word spoken that a pupil does not understand, the first logical deduction that he does not comprehend, he should be led to ask questions about, and the explanation of the same should be repeated over and over till the difficulty is overcome. If the pupil has reached such age and experience that he can ask books the questions that throng his mind, and, having asked, has the will and the power to find the answer sought, well and good. But the average pupil needs the *living teacher* to lead him in the path of true knowledge. The pupil, of course, has his work to do, and be the teacher ever so faithful, he can not do the work for him. He must be required to reproduce the explanations given—to memorize such matters as are necessary for a full comprehension of the subject. Reasonable tests must be brought to bear upon him to make sure that he is no shirk, but a master of his studies. The great point is, the teacher must *instruct* his pupils. He must labor with them and for them, and ever be ready to answer as well as to ask questions. We, the teachers, are the real servants at school. We are to do for the pupils, to take every means in our power to give them the benefit of our experience and knowledge, to serve them, to

lead them. We are pedagogues! In a word, the teacher should do for the child what the text-book cannot do for him, and what he can do but poorly for himself, namely, give him that *instruction* which shall tend to develop to its fullest extent his physical, mental and moral being. A catechist is by no means a teacher. The true teacher is a helper, not a puzzler.

W. H. SMITH.

CURIOSITIES OF EXAMINATION.

EDS. ILLINOIS SCHOOLMASTER:—I notice in your Dec. issue an article under the above heading, which, after giving numerous examples of absurd blunders and mis-statements, found in the replies of candidates for examination as teachers, propounds the question, "Where is the fault, and what is the remedy?"

I observe that, in a very great majority of the cases cited, the errors were committed in attempting to answer *special questions*, or to speak more strictly by the card, in attempting to answer questions which merely draw upon the applicant's memory for *isolated* facts in very special departments of human knowledge.

I believe that the fault will be found to lie at the door of the board of examiners in nine cases out of ten. They frame a set of questions which draw, in the majority of cases, upon the memory alone. The unlucky candidate is required to answer at once, with no means of refreshing his memory, and without any opportunity of consulting the sources of special information to which every really good teacher habitually refers for such special information. It is utterly impossible for any teacher to carry in his mind all the details on which he is liable to be examined under the present system. In case he attempts the task of *cramming* with isolated facts to meet the contingencies arising from this "special-fact" mode of examination, he is sure to find that his memory is overloaded, and refuses fully to honor his drafts for information.

Would it not be better to confine the examination of teachers to general topics mainly, such as the leading principles of the various branches with which they are expected to be conversant, the outlines of the best methods of imparting and acquiring knowledge, etc., etc.?

I have perused with some interest, the list of questions used at the late state examinations. The questions on Orthography are generally well chosen, but the 6th is decidedly objectionable, for the reason that good Orthoepists differ upon the subject. The questions on Reading will pass muster as not

being obnoxious to any serious objection. Owing to the constant and *eternal* drill in Arithmetic, teachers ought to be considered to be pretty thorough in the details of that science. The questions on "Theory and Art" are unexceptionable. Under the head of "Geography," we find a list of questions of which all but the 2d, 5th and 6th are mere drafts on the memory, and consequently objectionable. It will puzzle teachers to explain the meaning of the statement in the 5th question, the statement being decidedly novel. The questions on Grammar are well enough, except the example given in the 3d, which does not amount to a sentence, and can only lead to blunders on the part of the excited candidates who have been informed by their judges that it *is* a sentence. The questions on "U. S. History," are all mere drafts on the memory in regard to *isolated* facts, which teachers who are obliged to keep incessantly occupied with innumerable operations, details and processes, cannot be reasonably expected to keep in view without special reference. The last question in "Astronomy" is one which also draws entirely on memory for an answer.

I do not wish to be understood to object to the propriety or usefulness of asking such questions as the above, as a mere *test* of memory; but I *do* consider the practice of asking what may with propriety be termed "memoria questions," and taking the answers as a reliable index of the relative qualifications of a teacher to be entirely erroneous.

It is a notorious fact that many fools who are incapable of generalizing will carry in their memories very copious budgets of isolated facts. In my opinion, our teachers should be selected, as far as possible, from the ranks of those who are in the habit of generalizing their knowledge, for they are the most competent to deduce and explain *general principles*. Having now pointed out what I consider to be the fault, and indicated the probable remedy, I remain yours, etc.,

A. B. STROWGER.

Anna, Dec. 16, 1875.

A LETTER.

SANDYVILLE, Dec., 1875.

John, did you say, write?—write what? Write about the use of the Dictionary? Why John, you are crazy. Everybody knows all about that. "No?" Well they all ought to. "True my boy, but they don't. Why, many teachers *can't* use it. More don't use it, and very few have the habit of using it." Why John, you are chaffing now. Don't the Normal schools all teach it? Don't the colleges preach it? Don't the academies drum on it, and the high schools thumb it? Don't county superintendents examine

in it? "Yes, true, and still there are few who *can* use it. A teacher not long ago declared Ve'-nice as he called it, (in the name of a play written by Mr. Shakespeare, called the "Merchant of Venice,") could not be found in Webster's Unabridged, latest edition, price \$12.00, all because he found it not in the body of the book. He was finally persuaded to look among the scripture proper names, as he remembered Shakespeare was a scripture writer." John, John, what stories you tell. Teachers who don't know how to use the dictionary to give the proper pronunciation of words!! Why John, you would make us think the teachers of Illinois were not teaching a well of English undefiled.

"Why, my dear Sam, the county superintendents don't examine on this subject; they don't dare to. It would cut down to the foundations."

Well, John, not long ago a parent in Sandyville asked his daughter to pronounce a word for him in his SCHOOLMASTER, and she could not do it. He told her to get her Dictionary and look it up. She told him she knew nothing about the key and could not do it. "Don't you learn how, in the Sandyville University?" said he. "No," said she, "We don't study dictionary," and she smiled at the old man's simplicity. So he called on Joe who goes to the High School, where the rich and the poor all get an education and where no religious ideas or pagan notions are taught, and Joe laughed outright. "We don't study dictionary, we study language," shouted he in the ear of the old fogey.

"Ann, Ann," said the old man, "You attended the Teachers' Drill, you can tell me, sure." But Ann was more amused at the idea than the children. "Why father," said she, "we drew maps and studied science and"—"Hold on," says the old man, "This is too bad. I'll tell Sam and have him write to the SCHOOLMASTER, and see if John of the SCHOOLMASTER won't do something about it. I want something done this Centennial year, and I propose we tax the teachers \$1.00 each to buy them a Centennial Dictionary to show them folks down at Feledelfy that we, the people of Illinois can per-nounce." So, John, when he told me the tale, I promised to interview you and see if county superintendents won't spur up the teachers to teach the use of the dictionary. Stir them all up, John, so that Sandyville University and High School and Teachers' Drill shall try it on and see how many of the teachers can use the book.

SAM.

To learn well a lesson in Orthography will do more to educate a pupil, than to translate carelessly half the Iliad, or to commit to memory, in a thoughtless manner, the classification of the whole Animal Kingdom.

*A PLEA FOR MORE SUPERVISION IN OUR SCHOOLS.

PUBLISHED BY ORDER OF STATE ASSOCIATION.

It is fortunate that in educational affairs, as in other matters, we are not all possessed of the same ideas, and impressed with the same mission; else the symmetry of our work would be marred, and its usefulness greatly impaired.

We meet to-day at a sort of educational exposition, and, as at its prototype of a more material nature are seen the results of the efforts of specialists in material appliances, so here are presented the views of those who labor in special fields, and whose thinking is confined chiefly to special departments.

Each presents what, from his point of view, seems very important, if not the most important.

The primary principal urges the necessity of more care in laying the foundation of the educational temple, as only upon a foundation properly made can a comely and valuable superstructure be built; the high-school principal demands more culture and higher education, as the more imposing the superstructure, the greater the inducements for occupancy; the normal or training teacher wants better workmen with better methods, and insists that how large the temple shall be or of what material it shall be built are not so important questions as how it shall be built; the linguist can see true symmetry only in that educational temple whose material has been dug from philological fields and prepared in classic mills; while the naturalist declares to you that only in nature's temple, presided over by the God of nature, can the young learner be made truly devout.

Looking from my standpoint, out of my little nutshell of experience and observation, I am disposed to urge the claims of more and closer supervision.

CERTAIN POPULAR TERMS DEFINED.

What I have to say on this subject will be better understood, if I give you my views of some terms that are of frequent use by school men. I understand the terms primary, secondary, and higher education to have relative meanings only, that are constantly changing, and that will change with the increase and spread of knowledge.

By primary instruction, I believe the State means, or should mean, such an amount of information and culture as shall give its possessor controlling power over the material elements by which he is surrounded, and at the same time shall place him upon that constantly ascending plane of intellectuality which is characterized by a knowledge of the duties he owes to his government and to society, and also shall put him in possession of a desire to remain upon that plane, and shall give him a knowledge and intelligent use of the means by which he can remain upon it.

That amount of instruction and culture which placed a man in control of his surroundings, and made him a profitable citizen to the state, and a progressive, intelligent man by comparison, before there was a mile of railroad, or a foot of telegraph wire, and when sod corn and log school houses were the pride of the state, would do very little toward making a man equally productive, equally progressive and intelligent by comparison, in Illinois to-day, with her net-work of railroads and telegraph lines, her fifty daily papers, her work shops, and her diverse and complicated interests of commerce and manufactures. And yet the State must, by primary instruction, elevate the citizen to this corresponding plane; for with less results, how can she hope to be remunerated for her efforts and expenditures?

With less than this she will but taunt and insult her citizens.

What is primary instruction in an exclusively farming community is not the primary instruction in kind or extent adapted to an exclusively manufacturing community, or an exclusively commercial or mining community. The primary instruction given when you and I were school children, will not do for the primary instruction of to-day, though the latter will include the former.

Primary instruction is not circumscribed by one R or three R's, or any definite number of letters of whatever name. Primary means first. Primary instruction

*Address of President of State Teachers' Association. Delivered at Rock Island, Dec. 29, 1875.

is first instruction.—first in point of time, no more than first in point of importance. The material, intellectual and social surroundings of the child must be understood, before it can be determined what for him is primary instruction; for who shall say that a knowledge of Fractions, or the Rule of Three, or Long Division is more important or primary than a knowledge of those plants by which the body is nourished and clothed? Who shall say that a knowledge of Geography, or man's position in space, is more important or primary than a knowledge of Zoology, or man's position among animals? Who shall say that a knowledge of History, or man's relation to time, is more important or primary than a knowledge of Physiology, or man's relation to himself?

A man goes down into a well and suffocates; another goes after him and perishes; a third follows and meets the same fate. Who shall declare that my child shall be taught to spell, "immateriality, and, incomprehensibility", yet shall not be taught the causes that deprived the state of three citizens, made three widows, and left three families of orphan children without support?

THE WORK OF EDUCATION DIVIDED.

There is an art of commerce and a science of commerce.

By the art of commerce, man is enabled to build warehouses, establish lines of steamships upon navigable waters, and extend railroads from city to city and mart to mart at will, without regard to their necessity or profit.

By the science of commerce may be determined where to build warehouses so that they shall be a source of profit to those who build them, a convenience to the community in which they are built, as well as an ornament, pride, and evidence of wealth and prosperity. By the science of commerce may be determined on what waters to establish steamship lines, and between what cities and over what territories to lay railroads, so that they shall be a source of profit to those who make them, a convenience to the cities by which, and the countries through which, they pass, as well as mere signs of wealth and prosperity.

There is an art and a science of manufacture.

By the art, mills and shops can be built and operated anywhere, at any time, and to any extent.

But only by the science of manufacture can be determined where, and of what kind, and to what extent, mills and shops should be built, and upon what systems they should be operated.

It is well known that mills and shops have been built and equipped with costly appliances, and operated by the most approved rules of the art of manufacturing, yet returned their proprietors and the communities in which they were built no profit, because they were established in violation of the science of manufacturing.

There is an art and a science of education. By the art of education, schools may be established and equipped and taught, and taught well, and yet fail to accomplish their true purpose, because of a lack of the knowledge by which is determined the kind of school, the kind and extent of curriculum, the methods of instruction, as well as many of the general laws of government suited to the conditions of the communities in which they are established.

Only by the knowledge of the science of education can schools be established, equipped and operated, that shall give to the young learner that information suited to his capacities, and demanded by his surroundings, and at the same time give him a symmetrical development of mind and body and soul.

It will be seen that I make a distinction between the science of education and the science of teaching. Two kinds of workers are therefore necessary for the establishment and operation of schools; their acquirements differ in degree and kind. The one, because of his superior wisdom and experience, determines where to place the school, the kind and extent of the course of study required, the method of teaching to be employed, and the general features of the management best suited to it.

The other, because of less wisdom and experience, must do work upon the details, according to outline plans and specifications. The one is a superintendent, the other is a teacher.

SUPERVISION DEMANDED BY THE DIFFICULTIES ATTENDING THE ORGANIZATION
AND OPERATION OF A SCHOOL.

Again, if we consider the school in connection with the practical difficulties attending its establishment, successful operation and healthy growth, we shall find proofs of the value and necessity of close, efficient supervision.

1st. No two communities have like needs or desires; no two stand on like planes of intellectual attainments; no two furnish like numbers of children; no two possess like resources of time and money; and hence, no two offer to the school like possibilities.

2d. The knowledges from which the course of study must be taken are so numerous, and each is so vast that a great difficulty is met with at the outset in determining what shall be taught; for what is primary instruction in one community is in another community impracticable instruction at least, and in another, impossible instruction.

3d. The standard of teaching ability is very low, and will be, until the public are willing to pay much more for their schools than now. The mass of teachers are young and inexperienced. The majority of them do not remain in the calling long enough to learn how to do even fair work. This evil cannot be corrected as long as those are employed who change their work when they change their relations to society.

4th. How many and what text-books shall be used, is a question that must not be overlooked in this enumeration of difficulties, for the use of poor books and too frequent changing of books are both evils that should be avoided with great care.

5th. The constantly changing condition of communities must influence the character of the schools, and change them from year to year.

6th. The rapid growth of knowledge will, and ought to, change courses of study and methods of instruction.

7th. The progress made in schools cannot be uniform because of irregular attendance occasioned by carelessness, epidemics and inclement weather. These difficulties preclude the possibility of fixed courses of study and uniform management. They present problems which must be correctly solved before even a primary school can be established and operated in any community, that shall do just the work that ought to be done by such school.

There must be some one whose business it is to solve these difficulties when the school is established, and he must be ever present to solve new difficulties of like kind while the school is in progress. Who shall this be? Not the parent; he has neither the qualifications nor the time at his disposal. Not the teacher; he (and I take the average of the better half of teachers) is disqualified by lack of knowledge, or if he be not disqualified he cannot attend to it for want of time; he must teach. Some one must do this work who makes it his business; without such supervising mind, the school will be imperfect and unsatisfactory.

It is not held, of course, that the parent is unfitted by capacity for this work. It is as possible for him as for any one to fit himself for it; but he cannot do this and attend to his daily vocations. Nor is it held that the teacher cannot fit himself for the work, but he also cannot do it and at the same time attend to his other work,—teaching.

SUPERVISION DEMANDED BY THE SCHOOL WHEN CONSIDERED AS A CREA-
TION OF LAW.

Again, if the school be considered simply as a creation of law, it will be seen that superintendency must be provided for.

For, 1st. It is as unwise for the State as for the individual to make plans, and fail to provide thoroughly for their execution.

2d. If it is the duty of the State to establish a free-school system, it is equally her duty fully to execute such system or provide for its full execution. The one cannot be divorced from the other.

Now, because of the great number of communities in the State, and the diversity in their conditions, there will and ought to be a great diversity in kinds of schools required. And because of this great difference in schools, a uniform plan

of establishing and managing will not do. But the State can execute directly only by a uniform plan. She must, therefore, provide for the execution of her plan by appointing superintendents, or causing them to be appointed or elected.

3d. The power to create carries with it the power to execute.

When the State orders the erection of a State House, provision is made for the full execution of the order.

That sufficient provision has not been made for the execution of the free-school system, may be seen by a careful consideration of the relations of all the parties connected with the free-school enterprise.

These are the child, the parent, the teacher and the State.

To the child, the school is a place to which he is sent to study and to learn. He stands to the school in the relation of a recipient. To the parent, it is a place to which he sends his child to learn such branches of knowledge as may be selected from the number there prescribed. The parent then stands to the school in the relation of recipient through the child. To the teacher, the school is a place where a certain kind of work is to be done, for which, it is supposed, he has qualified himself. The relation of the teacher (he who does class work) is that of operative. To the State, the school is an organization of her own creation; the relation of the State to the school then, is that of proprietor.

Of course, no one will claim that the child is qualified to direct this supervision. The parent is disqualified because of selfish interest and lack of preparation; the teacher is disqualified because of selfish interest, as well as because he has other things to do. But one party remains,—the State. The State is qualified by reason of proprietorship, by reason of superior foresight, and by reason of power delegated to her by the parent in his capacity of citizen, as an integral part of the State.

THE VALUE OF SUPERINTENDENCY PROVEN BY EXAMPLE.

Again, the value of superintendency is shown in what it has already effected in this, and other States.

The State established a school for the unfortunate deaf and dumb within her borders, and in the law creating that institution it was provided that there should be a superintendent appointed. That superintendent has made the institution what it is. No course of instruction was prescribed; no system of teaching was made incumbent; but the disposal of all matters, which has made that institution so great a blessing to its afflicted inmates, was left to the superintendent. His authority was limited only by the amount of money to be used. What has been said of this institution may be said of the State Normal Schools, the Industrial University, and all other public institutions of the State.

The State has further recognized the value of superintendency in the charters granted to many cities for the establishment of free schools, and in the general school law, by granting to boards of education power to appoint superintendents.

The value of the schools affected by these provisions depends more upon the superintendents than upon the boards of education or the wealth and intelligence of the communities, though these are factors of no mean importance.

The man at the head makes the school, be it good or poor; without him the school is not made. It is a mere fortuity, a thing of chance.

Strange indeed is it that superintendency has not been more generally adopted, so frequently have its value and necessity been demonstrated!

The success of the graded school is universally admitted. These are generally under the control of superintendents.

True, Procrustean beds, and cast-iron systems, and red tape, and other evils exist, but these are largely, if not wholly, attributable to a lack of intelligent, close supervision, in the absence of which exact courses of study must be prescribed, and the schools operated by fixed laws.

The inevitable written examinations at the close of the term for grade or promotion to the high school, are given by the superintendent that he may know that the schools are doing something, and what they are doing, not, as has been charged, for the sake of making a display, or cramming the minds of the children, or "murdering the innocents," although they may result in some or all of these.

Yet, in spite of these evils that exist to too great an extent, I admit, aside from the special institutions, such as the State Normal Schools, the Industrial Univer-

sity, the Deaf and Dumb Asylum and others of like kind whose supervision is amply provided for, and whose value and success have resulted from that supervision. I declare it to be my conviction that the graded schools of the villages and cities are about the only redeeming feature of the free-school system. And if there be elsewhere anything of value, it is because efficient county superintendents have made it in spite of the adverse conditions.

Give to these schools the supervision demanded by the great interests at stake, so that the strength and characteristics of the teachers, the progress of the children in all their studies, shall be known to the superintendent, not by the filing of reports or examination papers in his office, but by daily and hourly visits and inspection, and there will be no cramming for examination, no exclusion from the high school because the candidate falls short half a tenth in geography or music, nor any other of the evils complained of.

At the opening of school, the superintendent and teacher on consultation decide that a certain reading class shall, during the term, read a given number of pages.

Specifications are made of what is to be accomplished.

If the superintendent can visit the class often during recitation hour, talk frequently with the teacher, witness the efforts of the teacher and pupils from day to day, and see the results of the tests of his work made from time to time, he will not need to examine the class at the end of the term to know that they have worked. Instead of the conventional ten questions, he can go before the pupils with other reading matter corresponding to that studied, which they have not seen, and ask them to read it. By this means he can test their ability to read, their ability to listen, and their ability to understand and reproduce.

This is such an examination as the outside world gives the pupils; such a one as the parents give. This is not an examination of the pupils, but of the superintendent and his plans, and of the teacher and his power, and is about the only kind of examination the superintendent needs to be concerned in. If there be not supervision enough for frequent visits or inspection, and frequent tests of the kind named, the "ten questions" must be resorted to, or the school will lapse into hopeless inefficiency.

If the "ten questions" are sent from time to time, and the sending means anything, their general tenor will soon be learned by the teacher, and the pupils will be prepared to answer them, if they learn nothing beside, or do not understand the answers they are made to give.

This is Procrusteanism.

To cast-iron systems or to anarchy, schools will inevitably drift, if supervision be lacking.

A community, or board of education, that curtails supervision, and then complains of cast-iron systems or inefficiency, is unwise and inconsistent in the extreme.

Further proof of the value of close supervision is seen in the introduction of music and drawing into our city schools when special teachers have been appointed to take charge of it: for these are not special teachers, they are special superintendents.

The superior results obtained in music in the city of Chicago alone attest the truth of this statement.

PROOFS BY ANALOGY.

Again, it is the part of wisdom to draw instruction from all possible sources. The manufacturer of railroad cars, wagons or cigar boxes, does not provide an elegant establishment, furnish the most modern appliances and abundant material with which to work, and then employ unskilled hands that are liable to change frequently, and allow these hands to make such cars, wagons or cigar boxes as each sees fit, and in the manner he chooses, and within the time best suited to his convenience.

Yet this is exactly what is done in our schools when young and unskilled teachers are employed with no superintendent to direct their work, with this difference, that in the one case wood and iron are to be wrought upon, and the products are to be cars, wagons or cigar boxes; while in the other case, minds, and hearts and feelings are to be wrought upon, and the products are to be men and women.

One of the most successful manufacturing establishments in Northern Illinois employs less than a hundred hands, and pays out less than a hundred thousand dollars annually for running expenses, yet, beside the necessary book-keepers and supply agent, it has a general superintendent, two or three department foremen, and a skilled man called a "gang boss" directing each fifteen workmen.

In the car department of the railroad shops in the city of Aurora, there are employed two hundred and nineteen men. To superintend these men and give direction to their work, there are a general superintendent, a general foreman, eleven sub-foremen, one time-keeper and one draughtsman.

This gives to each sixteen men, on the average, one whose only business is to plan and supervise. This is done in shops that are models of excellence, and are supplied with an abundance of the most approved modern machinery.

In one of the counties, which is considerably above the average county of the State, the interests of eight thousand children of school age, not including those of the cities, the custody of a quarter of a million dollars' worth of school property, and the yearly expenditure of nearly a hundred thousand dollars, if the cost of text-books be considered, are entrusted to a hundred and fifty teachers, many of whom are young and inexperienced, and others transient and irresponsible, without a single person whose duty it is to tell them what to do, or when or how to do it.

I have visited many other manufacturing establishments, and find that what has been said respecting the two establishments named is a fair presentation of them all. I have examined the school statistics of other counties, and have found that the conditions described in the county alluded to are better than those of the average.

I have conversed with the *employees* of these industrial establishments, and find them to be intelligent men. They ascribe, with a unanimous voice, the value of their work to the close and definite directions given them by efficient and responsible superintends or "gang bosses."

I have talked with teachers of country schools, and teachers of town schools that are without superintendents, and they with equal unanimity ascribe the difficulties and unsatisfactory results of their work to the want of any one having authority to assign work and give definite directions for its accomplishments. One example will serve as a representative of a score that have come under my own observation, and of thousands in the State. The teacher, a young lady of inferior education and without experience, offered as an excuse for the unsatisfactory results of her school, the large number of classes she was obliged to hear. Although the school was small, but fifteen pupils, she had eight geography classes using books by five different authors; seven arithmetic classes in books by four different authors; two fifth reader classes in books by as many authors; one fourth reader class; two third reader classes in books by an equal number of authors; four primer classes, and two spelling classes—*fifteen* pupils and twenty-six classes.

Yet another point in connection with this matter: The laborers employed in the shops alluded to are, in the main, skilled workmen, while the teachers employed in the schools are, in many cases, young, inexperienced and totally unskilled. In the county alluded to, only ten of the one hundred men examined asked for first-grade certificates. Only *twenty* of the three hundred and fifteen women examined asked for first-grade certificates. Of the thirty who asked for first-grade certificates, of four hundred and fifteen examined, only nineteen were successful. The majority of those teach in the city schools, that are provided with superintendents.

An examination of the report of the State department will reveal the fact that less than twenty-five per cent. of the teachers in the State apply for first-grade certificates, showing that a large majority of those teaching do not consider themselves competent to do good work.

Still further, the *employees* of these machine shops are permanent, while the teachers of the schools change frequently. This is shown by the ratio of the number of teachers to the number of schools, which is nearly two to one. Evidence of inexperience and inefficiency in the majority of teachers is shown by the low per centages upon which county superintendents grant even second-grade certificates, and the unsatisfactory answers in matter and form which many give to questions.

purposely made easy to suit the circumstances. A further evidence is found in the qualifications of the teachers who attend the Institutes and Normal Drills throughout the State: for it may be fairly supposed that these are the best teachers, because they have enterprise enough to attend such meetings. That teachers are constantly changing is made painfully manifest to the Institute worker by the small number of familiar faces he meets when conducting Institutes for several successive years in the same place. Surely no machine shop, doing a miscellaneous work in repairs and "odd jobs," demands more, or closer, or more intelligent supervision than a school, or a system of schools, employing an equal number of teachers; and the same financial policy that places one or more superintendents over the one demands an equal or greater amount of supervision over the other.

THE APPOINTMENT OF SUPERINTENDENTS SHOULD BE MADE MANDATORY.

The State has not discharged her duty or exercised her full prerogative, in that she has not provided for the efficient execution of the public-school system.

She has provided for the election of boards of directors who alone, legally, have the work of supervision in their hands. They have power to appoint a superintendent, but are not required to do so.

These, with the county superintendency, are all the provisions that are made for this very important part of the work.

Let us briefly consider these.

Boards of directors are elected without regard to qualification, and no compensation is allowed them for their time and labor; so that they have no inducements to qualify themselves for the work. The work, too, is of such a nature that it cannot be done by a board. It is the work of one mind. Not being required to appoint a superintendent, boards have exercised the privilege in so few cases that it has done little more than to prove the necessity of making the appointment obligatory; for while they have not appointed superintendents, they have failed to exercise any supervision themselves; but have left the work undone, and the schools have been turned over to the caprices and selfish wishes, and ignorant prejudices of nomadic teachers.

The results of these conditions are inefficient yet enormously expensive schools, untaught children, dissatisfied parents, grumbling tax payers, and anathemas on the whole free-school system. Where results the reverse of these exist, the cause may be traced to superintendency.

County superintendency has practically fallen to the ground of its own weight. Enough power was not originally given to it to enable it to accomplish much good.

Practically, it could not appoint, transfer, or remove teachers; it could not legally determine the kind of school, the duration of school, the course of study, or the management to be employed. A territory was assigned to it, the very extent of which precluded the possibility of close supervision, had it not been shorn of its strength. The law requires that the superintendent be a resident of the county electing him, which may, or may not, contain within its borders a man competent to discharge the duties of the office, even if there were no unreasonable requirements, and no limitations to power and opportunity.

Finally, the selection of the man was left to the mercy of political caucuses, and the remuneration of the office was so small, that it became a sort of trading capital among the political office seekers, so that it was almost an impossibility to have even the best man within the territory chosen.

These conditions must all be reversed.

Those who have had time and opportunity to give the subject thought are agreed that our schools need more and closer supervision. But the people are not yet aroused to an appreciation of this necessity, and but few of them to a belief in the value of any supervision.

That school men may be the better prepared to present the subject in its strongest light, they should analyze it and determine, if possible, the extent of supervision required, have a definite end in mind, and work for that end. Vagueness of purpose has thus far characterized the efforts of school men to too great a degree.

THE UNIT OF SUPERVISION.

Every school must be superintended and taught, but a teacher and superintendent cannot be furnished for every school. It therefore becomes necessary that

the schools be arranged in groups of the right size for supervision. These may be called school units, or units of supervision. It has been found that cities and villages, although differing in size, furnish groups for such units. It has been found also, that counties are too large for such units. And as there is but one political division smaller than a county, let the township be made the school unit, or the unit of supervision.

The schools of each township, therefore, should be built up into a single group which should embrace the central high school; and over this system of schools should be placed a competent superintendent. He should have power to dispose and depose, and should be held responsible for the welfare of every child of school age within the territory. He should have power to determine the course of instruction, appoint, transfer and dismiss teachers, and should have all other powers now exercised by superintendents in many of our cities. It should be legal to select this superintendent from any township, county or State, where the right man can be found. He should be appointed by the board of education, and not elected by the people.

ADVANTAGES OF TOWNSHIP UNIT OF SUPERVISION.

Many advantages would result from this unification and thorough supervision of the schools of a township. Fully to set these forth would require more time than can be given now. I will notice a few, only, of the most prominent.

1st. To every child is ensured a good school adapted to his needs; for, if the school nearest his home does not suit, he may be transferred to another. A vast and irreparable loss of time is thus prevented.

2d. Employment is furnished for home talent. Most of the teachers may be trained and prepared at the central high school, under the guidance of the superintendent. In this way, better, and at the same time, cheaper schools are insured.

3d. The social and intellectual resources of our country communities are, as a rule, lying dormant. They need to be aroused and made available. By the unification of the school interests of the township, and the establishment of a central high school, a nucleus is made for the clustering of all the educational factors. Thus may be organized literary societies, lecture associations, debating clubs and other societies, that benefit the young republican as much by the efforts they compel in their organization and operation, as by the nominal purposes for which they are created. By these means may be saved to our rural districts many young men and women that now seek such advantages in town or city.

4th. Better care will be taken of the school property of the township. This will be a very great financial saving.

5th. Township and district libraries may be established, and the pupils taught how to use them. By the way reading is taught in most of our schools, pupils acquire little more than the ability to call words. In the exercise of this ability, the restless, enterprising ones, in search of entertainment, gravitate, naturally, to dime novels, the *Police Gazette* and kindred literature, for such reading only is within the range of their comprehension. Only by the use of libraries is it possible to train pupils to seek entertainment in that rich field of useful information, good books.

This is a matter worthy the consideration of all. If the child be given the use of a power so prolific of good or evil, it is of the highest importance that he be at least introduced to that field, where alone it may be used with safety.

SOME OBJECTIONS ANSWERED.

Many objections will be urged to an attempt at so much superintendence; I will briefly notice a few prominent ones:

1st. "It will cost too much".

More money may be paid, possibly, in some townships than is now paid. But if there is, it will be because they will have more schools and longer terms.

An examination of the reports of the schools of country townships shows that the teachers of the country schools get larger monthly pay than the subordinate teachers of our graded schools, and that the schools of the country cost considerably more per day's tuition than the schools of the large cities that are managed by superintendents. This is because of small schools and irregular attendance in the country. Both of these evils will be corrected by proper supervision.

2d. "By so close supervision, teachers will become little more than routine workers to do the bidding of superintendents."

This may be dismissed with a single word. A comparison of the teachers of our best schools, and of those that have had no supervision, proves the falsity of the assertion.

I ask for closer supervision in schools already grouped and organized, that cast-iron systems and fixed laws and red tape may be abolished. When these disappear, routine work goes with them, and the teachers' shackles fall off.

3d. "County superintendency having been tried and having failed, the people will not readily adopt a more cumbrous system, and one which seems to them so expensive."

The people do not know the cause of the failure of the county superintendency. There is no other institution of the people for which so much money is paid, and in which they ought to have more interest. Yet I hesitate not to declare it as my opinion that there is no other institution of their own creation that is so far from them, and of which they know so little.

I have faith to believe that the people will supply abundant supervision, or any other needful thing, if they can be made to see its value. Get the people close enough to the schools to understand them and their needs, and they will take care of them.

It is as much the purpose of the school to instruct the community as the pupil. This cannot be wholly done through the schools. Parents have not the time at their command to visit schools often enough to gain an insight into the philosophy of their plans and purposes. It cannot be done by contact of teacher and parent. The task is too great in consideration of the other heavy demands upon the time and strength of the teacher. It should be done by the press. The schoolmaster has not in the past made enough use of this most important factor of education and enlightenment.

Teachers' journals have done giant work in benefiting the schools, by spreading professional knowledge, in affording opportunity for interchange of views, and in many ways raising the standard of teaching. The poorest teacher who reads these journals will acknowledge their value, while the best teachers will ascribe their success as much to the assistance afforded by them, as to all other helps combined. But these journals do not reach the people. I do not suppose there are fifty men in this county, besides teachers, who can name an educational journal published in the north-west, or in the nation.

Now, it is necessary that the educational journals be secularized, or that the secular papers be pressed into the educational work. This is an excellent time to begin this new work, just as the community seems to be entering upon a new educational life. I urge what the school journals have been advising for years, that you set forth the interests and aims of popular education in your home papers; and when doing this do not fail to point out shortcomings of schools, teachers, parents and communities, as well as their merits. The profit resulting from this new work would be two-fold. The people would be made acquainted with what school men desire, and are striving with their might to accomplish, and the workers would gain new strength, which would give them more influence than all their other attainments—the ready ability to present their case strongly to the public. This ability is especially needed, now that the public-school question has become an "irrepressible" one. Like Banquo's ghost, it will not down, but appears in almost every issue of the daily, weekly and monthly press. And these discussions, though professing to be friendly in most cases, reveal on close inspection, seated jealousies favoring denominational schools, as well as open opposition of the enemies of free institutions. I have failed to read one article outside of the educational journals that impressed me as coming from one who had worked in the public schools, who had the harness still on, and who was at heart friendly to them.

Now, it is for the interests of the schools that the views of teachers be given to the people, since having given much attention to the subject, they may be expected to have ideas on school matters that are valuable.

This cannot be done in the educational journals. The people do not see them. You can reach the people only through the secular press.

4th. "So many superintendents cannot be supplied!"

This will be regulated by the law of supply and demand. Principals and superintendents have been supplied to our graded schools when they have been wanted. Men have been supplied to the county superintendency when they have been really wanted.

Lay before the people the plain facts; tell them the true condition of our schools and the causes of these conditions; show them that by a change of these causes, the conditions can be changed, and, as I believe in the people, I believe they will co-operate to change the causes and improve the conditions. When this time comes, there will be a demand for a class of school men who have made the science of education and supervision their study, and have adopted it as a life work, who shall be known not as professors, but as superintendents.

W. B. POWELL.

EDITORS' DEPARTMENT.

We have a hobby. If any one charges it upon us, we shall hasten to plead guilty. In recent numbers of *THE SCHOOLMASTER* we have ridden it again and yet again. We have been to the State Association and attended the sessions of the superintendents' meetings. We observed that the most advanced members were astride the same quadruped. Superintendents Wells, Higgins, Williams, Wilson, Scott and others of like spirit say most emphatically that *the common schools can be graded*: not of course with the closeness of the town schools with their principals and assistants, but fairly graded. A case was reported in which the school had an attendance of fifteen, and there were *thirty-two classes*!

Shades of Pestalozzi!! We presented, in the January number, the working plans of one of these schools which had been transformed from chaos into organization. Supt. Wells is giving, from time to time, the results of his rich and varied experience. Will the common-school teachers utilize what the *SCHOOLMASTER* is giving them, and put their schools into such condition that method shall characterize their work, and that valuable time shall not be wasted?

The text of President Powell's address, at the Rock Island meeting, was *supervision*. The address appears in our pages, and we suggest to our readers that a careful perusal will repay them.

Next year our legislature again convenes for its biennial inspection of the school law. Can anything be done to put county supervision upon its feet? Some counties are doing nobly, but they are few in number.

We shall take few steps in advance, until intelligent supervision is the rule rather than the exception. Any town or city is at liberty to seek anywhere for its superintendent. Why should counties lack the same privilege? As well might the law demand that every teacher shall be a resident of the district in which he is temporarily engaged. Some counties are fortunate enough to have professional teachers in the superintendents' offices; most are not, and would permit no supervision if they had.

We have already referred to a school of fifteen pupils and thirty-two classes. If the superintendent had not been abroad, the teacher would have kept up her thirty-two recitations until the end of the term; but a half-

day's inspection corrected the mistake and put the school upon an entirely new track. How much did that half day save to the people of that district? Yet it is quite likely that the superintendent's constituents, or many of them at least in that part of the county, see no need of supervision.

If the teachers of the State really desire to see the school law so changed that the superintendents shall not be selected on account of political affinities, or because they know how "to pull wires," it can be accomplished. The law is not the schoolmasters' law; it should be and can be if they will unite and utilize their political influence.

For a first-class hotel, commend us to the Harper House, Rock Island. The pedagogues took it by storm during the recent educational meeting. Among the hundreds present we heard but one expression, "Ben. Harper is a host." The only dissatisfied person of whom we heard was the bar-keeper. "What sort of a crowd is that, anyhow?" he asked,

For the kind attentions received by THE SCHOOLMASTER, Mr. Harper has our thanks, and if any of our readers happen in at Rock Island, they will receive the best of care if they leave their autographs on the register of the HARPER HOUSE.

We notice the following statement in an exchange: "In the name of religion, the Puritans burned witches." Now, does not this writer know that he is uttering a very stale lie? There is no reason to believe, and no credible history asserts, that any person accused of witchcraft was ever burned in Massachusetts. It is time for people, who mean to tell the truth, to stop making this infamous assertion. About twenty persons were *hanged* as witches in Salem, Mass., at the time when thousands of men and women were executed for this supposed crime in England and in Germany. This is bad enough; but we fail to see why the folly of the Puritans in this matter should be held up to the world more than the greater folly of the rest of Christendom.

The twenty-second annual meeting of the State Teachers' Association, recently held at Rock Island, was one of the most successful that it has ever held. The attendance was only moderate, but there was a very good representation of the leading teachers of the State. The programme was carried out as published, with but one failure of any one who had an important part; and a sufficient excuse was rendered in this case. The spirit of all the meetings was admirable, and the general character of the exercises was of a high order. We print in this number, President Powell's address in full. The theme of the address is very timely, for there is no greater need of our schools at present than more efficient supervision; this is true of all classes and grades of schools, with only an exception here and there. One of the most significant things done was the movement of the college and high-school section, looking to a harmonious working of the high schools and colleges. The steps taken were in the right direction; and we hope the result may be a unifying of all departments of our educational work.

The weather was as fine as could be, with the exception of the last day. It was so rainy on the last morning that the closing session was held in the parlor of the Harper House. A large number of the members were guests of this hotel; and all were loud in praise of the management, for excellent accommodations, polite treatment and very reasonable rates.

Carbondale was proposed as the place of the next meeting; and the feeling seemed to be strongly in favor of that city.

We publish in this number several papers relating to the efforts now making to represent creditably the educational affairs of our state at Philadelphia next summer. We bespeak for these the earnest attention of all teachers and friends of education. Some of the other states have the start of us in this matter; they have given it more attention and effort; and their work is now in a good state of forwardness. If the Empire State of the west is not to occupy a very inferior place, our teachers must work earnestly and rapidly. Two things to be done present themselves to all teachers of every grade; first, to do what they can towards making up the necessary funds to pay the expenses of the exhibition; and, second, to render all the aid possible in furnishing such material as is called for in the circulars. Read the circulars, read them carefully; and then do *at once*, whatever you can in response.

With this number we begin the publication of a Chicago Department, under the editorial charge of Mr. James Hannan, who, for several years, has had charge of one of the graded schools of the city. He is our authorized agent and will receive subscriptions and make contracts for advertising.

We commend Mr. Hannan's opening article to the attention of all.

Owing to the unusual pressure upon our pages, we are obliged to defer the report of the Principals' Meeting until the March number. The officers are M. L. Seymour, Prest., and M. Andrews, C. E. Mann and A. Harvey. Executive Committee

OFFICIAL.

EDITOR SCHOOLMASTER:—Justin L. Hartwell of Dixon, Ill., asks that the following question be answered through the "SCHOOLMASTER:"

"Dixon is divided by Rock River. Each division has a school entirely separate from, and independent of the other. For which school should the property of those living on one side of the river, and having merchandize, etc., upon the other side, be assessed?"

In reply I will observe:

1. The apparent contradiction between the school law (sec. 45) in respect to the assessment of personal property in the district where the owner resides, and the statute (see rev. stat., sec. 13, p. 859,) as to such property being assessed in the district where it is located, does not exist except by

implication; and this implied contradiction is contrary to a well known maxim of the law (sec 12, Ill., p. 339., "Town of Ottawa, vs. the county of LaSalle."

2. In the statute referred to above, *the particular kinds* of property that shall be assessed where located, such as merchandise, etc., are mentioned, while the language of the school law is general, and to some extent, vague; therefore, the specific words of the statute must be held in force as against the indefiniteness of the school act.

3. Hence, the conclusion, that every kind of personal property mentioned in the statute cited, must be taxed for the benefit of the district in which such property is found. Respectfully,

S. M. ETTER, Supt. Pub. Inst.

This department desires definite information immediately from the superintendents and teachers who propose to take part in the Centennial Exposition, upon the following points, viz:

1. The number of bound volumes, with their size, which they have in course of preparation, or have planned to prepare.

2. The number and size of port-folios and bound volumes containing illustrations, interior views, exterior views, drawings, students work, etc.

3. The number and size of maps and charts.

4. The number and size of models of buildings.

5. A statement as to the character of the display the several schools propose to make.

The allotment of space by the curtailing commissioners will positively be made as early as February 1st. It is therefore necessary that the information here called for, be furnished without delay.

S. M. ETTER, Supt. Pub. Inst.

EDUCATIONAL INTELLIGENCE.

REPORT OF THE ANNUAL SESSION OF THE COUNTY SUPERINTENDENTS' ASSOCIATION HELD IN THE OFFICE OF THE BOARD OF EDUCATION, ROCK ISLAND, DECEMBER 27TH, 28TH AND 29TH.

Monday 7:30 P. M., Hon. S. M. Etter, who is President, *ex-officio*, not having arrived, Superintendent E. L. Wells of Ogle county, was elected chairman. Jas. H. Seaton, of Putnam county, read a paper on "How to make School Visitation all it should be." He advised County Superintendents to have a definite plan of action. They should observe the condition of school-houses and surroundings, and see that there is a uniform programme, and that no deviation is made from it on account of their presence. They should notice methods of discipline, and of imparting instruction, and discourage too close adherence to text-books. They should assist in classification, and should see that the common-school studies are not neglected. Public sentiment is all right in giving preference to what is sneeringly called the three R's.

When they find a school doing well, they should "Let well enough alone;" bestow a few words of commendation, and pass on to schools where their time is more needed. They should mingle with the people, and endeavor to teach them to distinguish between efficient and inefficient teachers. They should endeavor to keep their best teachers in their own counties, by assisting them to find good schools at good salaries.

Jas. B. Donnell, of Warren county, next presented a paper. Subject: "Plans for Village and Country School-houses." He first considered the location, which should be as near as practicable to the geographical center of the district, though that should be sacrificed for crossing of public roads, or healthful location. The surroundings should be well kept up. Do not build a mere shell because it is cheap. It will prove expensive in the end. Build more for utility than show. Sometimes useless expense is incurred. There comes a reaction, and retrenchment in the necessities of the school is the result. The rooms should be high, well lighted, and ventilated.

A general discussion followed on means of heating and ventilating. Adjourned.

Tuesday, 9 A. M., Hon. S. M. Etter, in the chair. The meeting was opened with prayer, by Superintendent E. L. Wells. Owen Scott, of Effingham county, read a paper, Subject: "County and Township Institutes. Should they be made by law a necessity, and teachers be required to attend them?" Mr. Scott maintained that teachers should be required to attend their County Institutes, also the Local Institutes in their vicinity. He considered the Local of more value than the County institutes. Home talent should be developed in the Local Institutes. A regular programme should be made and strictly followed. Tardiness of teachers, should not be allowed. Time should not be consumed in discussing theories or hobbies. The institute should be a model school, where teachers may go, not merely to add to their scholastic attainments, and supply the deficiencies of a superficial education, but to learn methods of instructing. This paper called out a lively discussion. Mr. Higgins was not in favor of compulsory education, and therefore not in favor of obliging teachers to attend institutes. Teachers who attend institutes merely through compulsion will not be profited thereby.

Mr. Williams offered the following resolution, and moved its adoption:

Resolved, That institutes should be made by law a necessity, and teachers be required to attend them.

The resolution was voted down, for the reason that the majority believed that the passage of such a law would do little good without additional legislative action providing that none but those of good moral character, good scholarship and successful experience in teaching should be eligible to the office of County Superintendent of schools: also providing for the closing of school that the teachers may attend the institutes and granting them compensation for such time.

Mary L. Carpenter, of Winnebago county read a paper, Subject: "Best Method of bringing Directors up to their Duty." First, bring County Superintendents up to their duty. We should be active ourselves: never dilatory where duty calls: prompt to meet all engagements: ready to co-operate with school officers, thereby inspiring them with our enthusiasm. Divide the time spent in supervision between teachers and school officers. We are inclined to give our whole attention to the work of teachers, whereas it is as much our duty to know how school officers are performing their duties.

John Gore, of Cass county, followed with a paper on "Qualifications of an Examiner." Examiners should be thorough scholars, should possess a high moral tone, and an unceasing energy. They should realize the responsibility of licensing individuals to develop *thinkers*, not *imitators*. The earnest solicitations of mental imbeciles, and moral or physical deformities, should never influence examiners to swerve from the path of duty. Applicants for certificates should never be licensed to teach merely because they can answer questions and perform operations. They should be required clearly to understand the principles involved. Those who manifest a lack of good common sense and of energy, should be excluded. The good of society demands that examiners should certify to nothing that they do not know to be true. While examiners should be kind and charitable, they should never allow Pity, Adversity, Partiality, or Importunity, to influence them. Examiners should be models in their respective counties, of scholarship, morality and industry.

A discussion ensued on physical deformity being considered an objection to a teacher. Mr. Williams of La Salle county, cited cases of successful teachers who were badly deformed. Mr. Wells was sorry that physical deformity was mentioned

last year*, and hoped that County Superintendents would correct at this meeting the impression that they considered physical deformity an obstacle to one's entering the profession of teaching. Adjourned.

Tuesday, 7 P. M., James P. Slade, of St. Clair county, read a paper on "Character. Its development in the public schools." He claimed that development of character depends more upon the manner in which school work is done than upon the particular subjects taught. The example of the teacher is of more value than any precepts however good, with which the teacher's practices do not accord. County Superintendents of schools were urged to be as searching in their inquiries in regard to an applicant's character as in regard to his scholarship.

The next paper was by Mary A. West, of Knox county. It will appear in subsequent numbers of THE SCHOOLMASTER.

Wednesday, 9 A. M., This was the last session of the association, and the time was consumed in discussing questions pertaining to school law.

A motion was made and carried that each County Superintendent, who has read a paper before the association, be requested to publish the same, and send a copy to each County Superintendent in the State.

The following were elected officers of the association for the ensuing year :

HON. S. M. ETTER, President, *ex-officio*.

MRS. PHOEBE TAYLOR, Cairo, Secretary.

HENRY HIGGINS, Jacksonville.

H. P. HALL, Sycamore.

CHARLES E. MANN, St. Charles.

} Executive Committee.

MARY L. CARPENTER, Secretary.

PROCEEDINGS OF STATE TEACHERS' ASSOCIATION.

The twenty-second annual meeting of the Illinois State Teachers' Association met in Dart's Hall, Rock Island, Wednesday, a. m., Dec. 29th, 1875.

The exercises were opened by prayer by the Rev. Mabie of R. I. Address of welcome by Hon. W. H. Gest, City Attorney; response by the President, W. B. Powell, of Aurora. President's annual address on A Plea for more Supervision in our School. Upon motion of J. W. Cook of State Normal, the following committee on president's address was elected: E. L. Wells of Ogle; H. L. Boltwood, Princeton; S. L. Wilson, Champaign; S. H. White, Peoria; Owen Scott, Effingham.

Chair appointed J. F. Everett, R. R. committee. Upon request of Prof. Forbes, State Supt. Etter was called upon to present the subject of the representation of the educational interest of Illinois, at the Centennial Exposition. He gave a brief report of plans of committees appointed in Nov.

Dr. Gregory of Ill. Industrial University, was next called upon. He made an enthusiastic appeal for help in money, work, and interest to carry on this great work of making a creditable exhibit of the educational work of Ill. J. L. Pickard of Chicago, made a report of the plans of the committee on results. Adjourned.

WEDNESDAY, P. M.

President called the house to order at 2:00 p. m. J. H. Blodgett of Rockford, read a paper on Country Schools. Discussed by E. L. Wells of Ogle, and B. G. Roots of Tamaroa.

Next in order was a paper by Dr. Sewall of State Normal, on the Uses and Abuses of the Laboratory, Method of Instruction in Natural Sciences. Discussed by O. S. Westcott of Chicago, and E. A. Gastman of Decatur. At this point, upon motion, Dr. Gregory was called upon by Association to continue his talk upon Centennial work. Upon motion of E. A. Gastman, the Association adopted the plans, thus far perfected, and as they shall be afterward modified, of the committees appointed at the educators' meeting held in Chicago, Nov. 19th, 1875.

*We quote from Mrs. Carpenter's paper of last year, the passage referred to by Mr. Wells. "Persons who are so much deformed as to be repulsive to the sight should be advised in a delicate manner to seek other employment. I have known of persons seeking employment as teachers, whose presence would be extreme torture to sensitive children."

Upon motion of S. H. White, the association instructed the president to appoint a State Executive Committee, consisting of five members, whose duty it shall be to further, perfect and carry out those plans for the educational exhibit of Illinois at the Centennial Exposition. Dr. Gregory moved that one of the first acts of such committee should be to secure the services of a competent and responsible treasurer, whose duty it shall be to receive and disburse all moneys upon order of executive committee, and give a full report of same at the next annual meeting of this association. Adopted. Adjourned.

WEDNESDAY EVENING SESSION.

Meeting called to order by the president. He announced the following executive committee:

Representation of the Educational
Interests of Illinois at the Centennial
Exposition of 1876:

HON. S. M. ETTER, Springfield.
DR. J. M. GREGORY, Champaign.
HON. J. L. PICKARD, Chicago.
DR. D. A. WALLACE, Monmouth.
DR. J. A. SEWALL, Normal.

The Rev. Ostrander of Dubuque, was then introduced as the lecturer of the evening. Subject, "Success." At the close of the lecture, the association held a short Centennial session.

Hon. S. M. Etter, as chairman of executive committee, announced that they had selected the Hon. S. M. Cullom, of Springfield, as treasurer. He called upon Mr. Pickard who, in the course of a few spirited remarks, said we proposed to show the world that we were getting ready for a second Declaration of Independence,—Independence of foreign skilled labor by the rapid working up of our own products of hand and brain. Dr. Allyn, of Carbondale, made an encouraging report of the financial part of the work in his section of the state. The beloved and honored leader, for so many years, of the educational work of Illinois, was next called on. Also, Messrs. Williams, Powell, White and others. Adjourned.

General Association called to order Thursday, at 2 o'clock p. m.

Listened to a fine rendering of "The Creed of the Bells," by Miss DeVoe of Hennepin. Reading of greetings from the Iowa and Colorado State Teachers' Associations. Association, upon motion, voted to send greeting to Indiana, Michigan, Wisconsin and Colorado teachers in council assembled. President Powell then announced the following committees:

Auditing Committee: { J. A. SEWALL, State Normal.
C. I. PARKER, Danville.
O. M. CRARY, Lyndon.

Committee on Resolutions: { ROBT. ALLYN, Carbondale.
W. H. RUSSELL, Kewanee.
E. A. GASTMAN, Decatur.

PRIMARY SECTION.

B. F. Barge reported the programme carried out with one exception.

COLLEGE SECTION.

M. A. West reported the High School Section as follows:

The College and High School Section met at the High School at 9 a. m., Dec. 30th. Rev. A. M. Brooks in the chair. Dr. Wallace, of Monmouth College, read a very valuable paper on "The work of the College as distinguished from that of High Schools and Academies on the one hand, and of Universities on the other." The work of the College is 1st, of inspiration; 2d, of instruction; 3d, of development; 4th, of discipline; 5th, of investigation. The spirit which it infuses should be at once strong and abiding, pure and exalted. It should breathe into the students the breath of life.

Henry L. Boltwood then read a paper on "Co-operation of High School and College," whose scope was to bring these two arms of the educational army into closer relations. He advocated the acceptance of *quality* rather than *quantity*, in entering examinations, and adopting a system of equivalents by which a scholar from the High School could be credited with the work actually done and classed accordingly. At the conclusion of this paper, the discussion was opened by W. H. Russell of Kewanee, and participated in by Drs. Allyn of Carbondale, Wallace of Monmouth, Bateman of Galesburg, Powell of Aurora, Everett of Rock Island,

Hewett of Normal, and others. Supt. Etter also spoke strongly favoring High Schools, and higher education in general. On motion of Dr. Wallace, seconded by Pres. Bateman, a committee, of which Supt. Etter should be chairman, representing the College and the High School, was appointed to devise measures whereby closer relations can be established between the two, and to prepare a scheme of equivalents to be published, if possible, before the close of the present school year.

The committee are, Dr. Bateman, Dr. Wallace, Dr. Gregory, Dr. Allyn, Prof. DeMotte, Profs. Brooks, Frost, Everett, Boltwood and Clark, with Supt. Etter as chairman.

A. M. Brooks, Pres. MARY ALLEN WEST, Sec'y.
S. H. White, of Peoria, read a paper on "Education and Crime." Discussed by C. I. Parker, Danville. C. C. Snyder, Freeport, read a paper on "How to Secure Good Teachers." Discussed by E. P. Frost, Peoria. J. H. Blodgett moved that visitors from other states be made honorary members of Association. Carried. Adjourned.

THURSDAY EVENING.

Readings by Mr. Smith and Miss DeVoe. Lecture by Dr. Edwards.

FRIDAY, A. M.

Association met in parlors of Harper House. E. A. Haight, of Alton, read a paper on "What is Practical for Graded Schools?" Discussed by Messrs. Finney, Hanford, Andrews, Smith, Lewis, Forbes, Piper, Powell and Barge.

Report of committee on nominations:

For President, E. C. Hewett, Normal. Secretary, Mary Allen West, Galesburg. Treasurer, J. P. Slade, Belleville. Executive Committee, Dr. Robert Allyn, Carbondale; C. I. Parker, Danville; F. Hanford, Chicago.

Report of committee on resolutions:

The committee on resolutions respectfully report the following:

Resolved, That the thanks of the Association are cordially tendered to the hotels which have entertained us at reduced rates.

Resolved, That our thanks are due to those who have delivered addresses before the Association; and to the officers and executive committee for the faithful discharge of their duties.

Resolved, That the president of this Association is respectfully requested to collect the papers read at this meeting and the meeting of the State Principals' Society, and have them suitably bound and placed in the hands of our executive committee on the Centennial Exposition.

ROBT. ALLYN,
W. H. RUSSELL, } Committee.
E. A. GASTMAN, }

President's address accepted *in toto*.

Constitution amended so that the number of vice-presidents be limited to number of districts represented. Adjourned to call of executive committee.

W. B. POWELL, Pres.

MARY W. WHITESIDE, Sec'y.

CHICAGO LETTER.

The SCHOOLMASTER, conscious of its ability, and in consonance with its title, introduces with the present number a regular Chicago Department. It is impelled to do this by the belief that a city so important as Chicago in a material sense, ought to, and does, furnish a school system capable of imparting instruction, enthusiasm and inspiration to the educational forces of our great State. It is further impelled to take this step by the belief that no adequate agency exists for, or at least accomplishes, the distribution of this influence in the manner and to the extent that the SCHOOLMASTER can. Chicago presents the most thoroughly organized, the best paid, and by far the largest, corps of teachers in the State. The growth of the city and the short average term of service of teachers make partial dependence of the city upon the State surrounding it a necessity. Hence the need of a mutual acquaintance of the State with the city, and of the city with the State. The SCHOOLMASTER, by the establishment and proper maintenance of its Chicago Department, hopes to further and perfect that mutual acquaintance to the advantage of both parties, and the great ultimate benefit of the cause of education in Illinois.

The manner of supporting the schools in Chicago does not differ materially from that prevailing throughout the State, except perhaps in one particular. There

are three principal sources of income; the State dividend apportioned as elsewhere in the State; money received as rents for lands belonging to the school fund, and as interest on the proceeds of the sale of such lands; and a direct tax upon the property of the city, levied by the common council for the support of schools. The control of all school moneys is in the hands of the Board of Education. It is the function of the city council to furnish money to supplement that received from other sources, but it may not dictate how the money shall be expended. In that matter the Board has absolute control, and is charged with the entire responsibility. It has no power, however, to borrow money or to consummate real estate transactions without the consent of the council. The particular in which the manner of supporting the schools of Chicago differs from that prevailing in some other parts of the State is this: The county of Cook pays a large portion of the State tax for the support of schools. It gets in return but a portion of the tax which it pays. While therefore, the State apportions to a portion of the State a considerably greater sum of money than it pays, Chicago gets much less. Though the discrepancy is not so great as formerly, it is still considerable. The loss in this respect to Cook county has fallen from \$95,919.14 in 1870, to about \$20,000 in 1875.

As a means of forming a conception of the proportion of school moneys furnished by each of the sources specified above, the following figures from the last or Twenty-first Annual Report of the Board of Education are given:

RECEIPTS FOR FISCAL YEAR.

April 1, 1874, to March 31, 1875

From School Tax Fund.....	\$765,966.21
From State Fund,	109,044.40
From Rents, Interest, etc.,	91,684.58
Total,	\$966,697.19

The Chicago Board of Education consists of fifteen members, who hold office for three years, one-third going out every year. These members are appointed by the Mayor, confirmed by the common council, and serve without salary. Their powers extend about as far as the legislature could extend them over the management and control of the schools. An enumeration of these powers may be found in Section 80 of "An Act to establish and maintain a system of Free-Schools," passed by the Twenty-seventh General Assembly of the State of Illinois, and approved April 1st, 1872. The amount of money placed under the control of the Board during the last year was nearly one million dollars. The actual disbursements by the Board exceeded eight hundred thousand dollars. There are now in the employ of the Board, to say nothing of Janitors, mechanics at work on new buildings, etc., more than 700 Teachers. Of these about 40 are men. There have been added to the school accommodations of the city during the past year, six new buildings owned by the city, and built under the direct supervision of the Board of Education, with an aggregate seating capacity for 4,708 pupils. When it is considered that this number exceeds the public school enrollment of any other city in the State, the comparative amount of work and responsibility assumed and borne by the Chicago Board may be inferred. A large amount of the work is necessarily done in committee, but the regular meetings are semi-monthly. The business and financial transactions of the Board are much facilitated by the employment of two officers at salaries of \$2,500 each per annum, known as the Building and Supply Agent, and the Attorney of the Board. However much pedagogues and theorists may be disposed to grumble at some of the Board's policies, preferences and other weaknesses, the virtues of personal honesty and official integrity are universally conceded. And this concession is an auspicious omen in the present aspect of municipal government throughout the country.

The Public Schools of Chicago are thus classified: The High School, with a four years' course; the Division High Schools, with a two years' course; the Normal School; the Grammar Schools, embracing an eight years' course, and all grades of pupils below the High School; and the Independent Primary Schools embracing a four years' course of study, and the lower half of the grades found in the Grammar schools. In point of fact the schools may be divided into two classes, the

Grammar Schools and the High School. The Normal School is an organization in which graduates of the High School are trained as teachers. The Division High Schools are organized for the accommodation of a class of pupils unable or unwilling to remain four years, after completing the work of the Grammar Schools. The Independent Primary Schools are, to all intents and purposes, branches of the Grammar Schools; the reason for their existence was the crowded condition of the primary department of the Grammar Schools in certain districts. The work of the Grammar Schools has recently been consolidated, so that instead of ten, there are only eight grades. As already intimated the work below the High School is divided into eight grades. Four of these are called primary grades, and the other four grammar grades. It thus appears how the so-called Grammar Schools contain each a primary department. The number of grades has been reduced from ten to eight on the supposition that it will simplify the system and make it uniform with that prevailing in several other cities. The eight grades are supposed to correspond to the eight years spent on an average in school work below the High School. The paternity of the idea is attributed to the Hon. Duane Doty, at present Assistant Superintendent of schools of Chicago. Another recent change is the abolition of academical work at the Normal School. It is intended that future Normal students shall be graduates of the High School, and that the future work of the school shall be strictly professional.

Mr. Lewis, for many years the esteemed and valuable principal of the Haven school, and previously of the old Dearborn, has resigned his charge. His experience, good sense, and practical wisdom will be missed by his associates and his school. There is nothing of the petty tyrant in his nature or in his administration. He is a robust, good-natured, clear-headed, sensible *man*. The Board of Education of Hyde Park, in which Mr. Lewis resides, lost no time in securing his services as the Superintendent of their schools. It is supposed his resignation is largely due to the adoption by the Board of Education of a rule which requires principals who live in suburban homes to choose, at or before the end of the present school year, between the sacrifice of their homes, and giving up their schools.

We regret to announce the death of two teachers. Miss Charlotte P. Kenyon, of the Douglas school, who found her health failing, sought in Colorado, rest and recuperation. She found—a grave. Miss Linnie E. Dahl, of the Cottage Grove school, worn with work, left school it was thought only temporarily, but within a week succumbed to an attack of brain fever. The teacher's work lives after her, and in the habits, lives and memories of the pupils of these young ladies will be found for them a living and perpetual *in memoriam*.

We have just learned of the death of Mr. Whittemore, long a faithful teacher of the city.—[EDITOR.]

SOUTHERN ILLINOIS NORMAL.

The holiday vacation passed pleasantly and swiftly to teachers and pupils. Nearly, if not quite, all students, who were with us before Christmas, are again in their places, and a number of new countenances are visible. We are glad to be able to report a considerable increase in numbers.

President Allyn and Prof. Foster attended the annual session of the State Teachers' Association at Rock Island. Prof. Jerome visited his former field of labor at Shelbyville, Tennessee. Misses Birch and Mason and Prof. Parkinson visited their respective homes.

The inter-society debate took place according to programme, and resulted in a complete victory for the *Socratic*—not *Locratic* as the types made it read in the last SCHOOLMASTER. The question argued was—*Resolved*, That Public Opinion be regarded as the standard of Right. The disputants from the Zetetic affirmed, the Socratic denied.

The first lecture of the Zetetic Literary Course was delivered by the distinguished Arctic explorer, Dr. I. I. HAYES, in the Normal building, to a large audience. Special trains came in loaded with people from neighboring towns. The gentleman spoke *warmly* upon icebergs, and *serenely* upon perpetual snow, and threw upon his chilly theme the rich glow of a bright fancy. The lecture was a very able one, indeed, both instructive and amusing, and more than satisfied the highly raised expectations of his auditors. At the close of the address, by the aid of Prof. Parkinson and his Scioptron, some excellent views of Arctic scenery were shown.

The second lecture of the course was given in the M. E. Church, on the evening of Jan. 5th, by Miss PHOEBE COUSINS, the lady lawyer of St. Louis. At the risk of being considered ungallant, we venture the opinion that the fair lady's address was neither original in character, nor strong in method of treatment; that it was neither brilliant nor profound. Her theme was, "The Higher Education of Woman." We think it could with equal propriety have been entitled "Woman's Right to the Ballot, or the Tyranny of the Male over the Female." Let it not be supposed from the above that the lecture was wholly wanting in merit. Her manner of address is good, and her ideas were expressed fluently, in well-chosen words. Mrs. Gov. BEVERIDGE and Mrs. Dr. WARDNER of Cairo, addressed a large audience on the evening of the 7th. The object of their visit here was to interest the women of Carbondale in the Centennial Exposition. The addresses were excellent, and the suggestions made will be energetically acted upon by the ladies of this place. We have also been favored with an address on "The Chinese Problem," by Rev. Dr. NORTON, D. D., of Alton. The Doctor's effort was an able one.

In accordance with the recommendation of the Educational Centennial Committee, a centennial collection has been taken up at our Normal, which at present writing, amounts to \$37.00, and will be increased.

Mr. WILL. A. PERCE and Miss CLARA HURD, both of Southern Normal, were united in matrimonial bonds during holiday week.

BUSINESS ITEMS.

"Speaking Pieces." Any boy or girl wanting to find fresh Poetry, Orations, Dialogues, Charades, etc., to speak at exhibitions, should take the *New England Journal of Education*, Boston, Mass., and have the benefit of Mrs. M. B. C. Slade's School Exhibition Department. Send stamp for copy.

New books. Guyot's Series of Geographies for common schools. Guyot's New Elementary Geography, price 75 cents; with a complete set of fifteen new, distinct and beautiful maps. Guyot's New Intermediate Geography, price \$1.50. This *new book* contains twenty finely-engraved copper-plate maps, which for accuracy and distinctness of expression are not excelled. Its text is symmetrically arranged, containing every valuable feature of the old book, reconstructed so as to include also a skillful treatment of *Industrial* and *Commercial* Geography. Was issued in June last, and has been received with signal favor throughout the country. Adopted for use in the cities of New York; Brooklyn, N. Y.; Newark, N. J.; Richmond, Va.; Davenport, Ia.; Lynchburg, Va.; Worcester, Mass.; Portland, Me.; Jersey City, N. J.; Toledo, O., &c., &c.

For Senior Grades, (High Schools and Academies.) Guyot's Grammar School Geography, price \$2.00. Guyot's Physical Geography, price \$2.25. Sheldon's Readers. By Prof. E. A. Sheldon, Principal State Normal School, Oswego, N. Y. Superbly illustrated with over 300 engravings from original designs.

Graded Series: Sheldon's New First Reader, 80 pages; retail, 25c.; introduction, 17c.; exchange, 13c. Sheldon's New Second Reader, 192 pages; retail, 50c.; introduction, 34c.; exchange, 25c. Sheldon's New Third Reader, 224 pages; retail, 5c.; introduction, 50c.; exchange, 38c. Sheldon's New Fourth Reader, 336 pages; retail, \$1.25; introduction, 84c.; exchange, 63c. Sheldon's New Fifth Reader, 450 pages; retail, \$1.50; introduction, \$1.00; exchange, 75c.

Sheldon's New Manual of Reading.—For Teachers only. Phonic Reading. Sheldon's New Phonic Primer, 60 pages; retail, 20c.; introduction, 15c. Sheldon's New Phonic Charts, 10 Nos., boards; retail, \$5.00; introduction, \$3.50. Endorsed by Principals of State Normal Schools, at Fredonia, N. Y.; Cortland, N. Y.; Potsdam, N. Y.; Brockport, N. Y.; Geneseo, N. Y.; Buffalo, N. Y.; Millersville, Pa., and Plymouth, N. H. Also in use in, whole or part, the cities of New York, Brooklyn, Oswego, N. Y.; Cleveland, O.; Williamsport, Pa.; Utica, N. Y.; Bath, Me.; &c., &c. Special price-lists and descriptive circulars sent on application.

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Newly published! A beautiful, copyrighted, Centennial, tinted lithographic print of the Illinois State Normal University, located at Normal, Illinois, and accommodating one thousand students. It contains a general view of the towering building and beautiful grounds, portraits of the four presidents, and sketches of their lives, a historical sketch of the University, views of the assembly and reception rooms, etc., and prominent surrounding buildings, comprising fourteen fine views. Size 15x26 inches, and printed on fine plate paper. Every Normalite should have one of these beautiful pictures as a reminder of his school days. Send one dollar to the artist and publisher, F. J. Howell, Corning, N. Y., and you will receive a copy by mail, post-paid.

REPORT OF ATTENDANCE FOR DECEMBER 1875.

	No. Pupils Enrolled.	No. of Days of School.	Av. Number Belonging.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	SUPERINTENDENTS.
St. Louis,.....	33 260	50	27 381	25 606	93-5	4 895	.....	W. T. Harris.
Hannibal, Mo.,.....	1 816	20	1 438	1 940	93-3	359	.....	584 *G. W. Mason.
Bloomington,.....	3 843	27	3 404.8	3 3 8.3	93-1	458	.....	Sarah E. Raymond.
Belleville,.....	1 639	18	.....	1 474	90	247	.....	561 Henry Raab.
Decatur,.....	1 561	18	1 497	1 433	95-6	238	.....	380 E. A. Gastman.
Rock Island,.....	1 591	20	1 396	1 323	95	84	.....	606 J. F. Everett.
Danville,.....	1 470	20	1 175	1 043	90	434	.....	Chas. I. Parker.
Denver, Col.,.....	1 440	20	1 354	1 326	95	346	.....	Aaron Gove.
Warsaw,.....	894	17	801	733	96-6	116	.....	447 John T. Long.
Morris,.....	758	20	601	561	93-3	398	.....	317 M. Waters.
Amboy,.....	733	19	624	567	90-9	293	.....	183 L. T. Regan.
Lincoln,.....	881	20	716.4	666.3	93	315	.....	263 L. Kingsbury.
Macomb,.....	713	19	647.34	663.73	96-37	44	.....	423 J. G. Shedd.
West Champaign,.....	603	18	567	541	96-5	74	.....	237 W. H. Lanning.
Clinton,.....	574	20	467.1	448.4	96	14	.....	436 L. Wilkinson.
Rochelle,.....	468	23	408.5	397.7	97-5	30	.....	249 P. R. Walker.
Lacon,.....	442	20	417	381	91-3	147	.....	118 D. H. Pingrey.
Petersburg,.....	430	18	370	335	90	.....	.....	M. C. Connelly.
S. Belvidere,.....	399	15	273.6	254.3	91-3	108	.....	15 J. W. Gibson.
Chenoo,.....	364	18	369	249	94	233	.....	77 Daniel J. Poor.
Belvidere,.....	344	13	323.8	236	96-6	16	.....	161 H. J. Sherrill.
Marine,.....	326	17	323	201	94-4	26	.....	114 Wm. E. Lehr.
Bantou,.....	306	16	180	159	88	191	.....	70 L. N. Wade.
Heyworth,.....	179	23	169	161	97	21	.....	115 S. B. Wadsworth.
Altona,.....	176	20	171	156	91	47	.....	68 J. H. Stickney.
Walnut,.....	136	23	114	105	93-3	157	.....	24 G. P. Piddicord.
Shelbyville,.....	646	20	598	553	92	50	.....	338 T. F. Dove.
Shushville,.....	464	23	430.5	408.6	95	159	.....	183 Harry A. Smith.
Wilmington,.....	456	20	408.9	369.3	91-4	180	.....	186 R. H. Beggs.
Marshalltown, Iowa,.....	779	20	703	668	92-67	88	.....	326 C. P. Rogers.
Sterling,.....	585	23	458.3	439.3	93-6	187	.....	198 A. Baylies.
Griggsville,.....	376	19	343	330	96	33	.....	178 A. C. Cotton.
Westfield,.....	187	23	154	137	88-3	97	.....	71 Wm. H. Brown.
Warren,.....	373	23	353	333	91½	36	.....	143 D. E. Garver.
Carthage,.....	463	20	391	343	96	319	.....	106 F. A. North.
Buda,.....	314	.....	199	187.5	94½	133	.....	74 J. N. Wilkinson.

ILLINOIS TEACHER,
Volume XIII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

MARCH, 1876.

NUMBER 94.

SOAP.

It is a credit to our common humanity that it has clamored for cheap soap, even ever since the earliest dawn of civilization. It is a positive virtue to be clean, and soap is a great help to those who aspire to this virtue.

LIEBIG says: "The quantity of soap consumed by a nation would be no inaccurate measure whereby to estimate its wealth and civilization. Of two countries, with an equal amount of population, the wealthiest and most highly civilized will consume the greatest weight of soap" And as the people of the United States consume annually nearly or quite five hundred million pounds of soap, it is tolerably safe to conclude that our country is, at least, in a hopeful condition, this, its first Centennial.

Soap has a wonderful history. There seems, to the superficial student of history, little connection between that meeting of the weird witches and MACBETH, and the landing of the PILGRIMS. Yet at that meeting was uttered the prophecy of the beginning of the House of STUART, one of whose representatives by intolerance, bigotry and mis-rule drove from England's shores some of her noblest sons. And so one may fail to see any connection between cheap soap, and the Ceniz or the Hoosac tunnel, yet to one who carefully reads the history of soap, the relation is apparent enough.

Everybody knows that hard soap is made of soda and grease; soft soap, of potash and grease. Potash is obtained from the ashes of land plants. Soda was formerly obtained wholly from the ashes of sea plants or sea weed. As the demand for soap increased, the supply of soda from this source failed to meet this increased demand, the price went up, there was a legitimate corner in soda. But the civilized nations had tasted the luxury of cleanliness, they demanded cheap soap. Come weal or woe they must keep clean, and to keep

clean required soap. Attempts were made to find a substitute, but without success.

France formerly, and for a long time, imported soda from Spain at an annual expenditure of four to five millions of dollars.

During the war with England, the price of soda, and consequently of soap, rose continually. Large rewards were promised to anyone who would discover some process for obtaining cheap soda, which meant cheap soap.

LE BLANC, a Frenchman, made the great discovery. He devised a process of manufacturing soda from common salt, and you know, of common salt, like "the making of books, there is no end." The great problem was solved, the people were happy, especially the women—soap was cheap—cheaper than ever before.

Marseilles possessed for a time a monopoly of soda and soap; but even soap could not sustain any bloated monopolist, for the policy of NAPOLEON deprived that city of the advantages derived from this great source of commerce, and thus excited the hostility of the people to his dynasty, which became favorable to the restoration of the Bourbons. So cheap soap, or the demand for it, did something, perhaps much, to break the power of the great conqueror.

In preparing soda from common salt, sulphuric acid is used. The principal element of this acid is sulphur. This was formerly obtained from sulphide of iron or "fool's gold," but this process of making soda required great quantities of the acid, and cheap sulphuric acid was demanded; consequently cheap sulphur. Sicily and the Lipari islands contained vast quantities of sulphur, quite pure. A thriving commerce in this volcanic product was built up, and Sicily became rich.

To prepare sulphuric acid, nitre or nitrate of potash is used. But the ordinary sources from which this salt was produced, failed to supply the increased demand. In fact, at this time, about all that could be procured was used in making gunpowder.

Something had to be done, for the people must have cheap soap, and cheap soap meant cheap sulphuric acid, and cheap sulphuric acid meant cheap sulphur and cheap nitre. Some enterprising sailors, landing on the coast of Peru, took a short journey inland, and discovered vast beds of pure nitrate of soda, and this salt was found to answer the purpose as well as its next neighbor (chemically speaking, nitrate of potash; and thus the gunpowder interest did not suffer. It was happily discovered that people could be killed, and those not killed might keep clean.

When sulphuric acid came to be manufactured on a large scale, extensive chambers of lead were required. Great difficulty was experienced in soldering the plates or sheets of lead together for the construction of these chambers, till some genius applied the oxy-hydrogen blowpipe flame to the edges of the plates, and fused them together without the intervention of any soft solder.

But another difficulty arose, for when the manufacturer attempted to concentrate this acid by evaporation, he discovered that this highly concentrated acid dissolved the lead, even as the weaker or more dilute had the solder, and thus he was driven to seek some more resisting metal. Platinum was found to be the metal sought, not being affected by the most highly concentrated acid. So Siberia set her miners to digging, and her metallurgists to preparing this metal to build these evaporating pans or chambers, some of them costing twenty-five or thirty thousand dollars. Again, when soda is made from common salt, muriatic acid is one of the products of the process. This acid for a long time was regarded as a waste product, and vast quantities were thrown away, thousands of tons annually. Now this acid, combined with lime, is used in bleaching cotton goods, reducing the cost of bleaching to one-fourth that of the former process, which was by spreading the goods on the grass, where they were exposed to sun, rain and dew. In fact, it would be impossible in England now to bleach by the old process one-tenth of the goods woven; simply for the want of room. Furthermore, sulphuric acid is used largely in manufacturing nitric, tartaric and many other acids which are used in coloring and other useful arts.

Finally, when soda and grease or oil are combined at a high temperature, as they are in the soap-making process, the oil yields two acids, which unite with the soda to form soap, and a peculiar sweet-tasting, bland, fluid called glycerine. This glycerine, combined with nitric and sulphuric acids, constitutes one of the most powerful explosive agents known. One pound being equal to three hundred pounds of gunpowder.

The people clamored for cheap soap—they got it, and with it came cheap sulphuric, nitric, muriatic and other useful acids, cheap bleaching powder, which means cheap cotton goods; cheap glycerine and nitro-glycerine, with which the great engineers have been enabled to blast holes through Mt. Ceniz and Hoosac mountain.

Think of these things when you wash your face, and remember gratefully the French doctor who discovered the process of making soda from common salt, for on this discovery, this process, hang all the other blessings above mentioned.

J. A. SEWALL.

"PUT MONEY IN THY PURSE."

What do I mean by using these words of the *honest* Iago? I mean just what I say, —accumulate property,—begin to do it now, and keep doing it regularly. To whom am I talking? To young teachers, whether men or women. It is the office of the "Old Boy" to give advice to those who are younger; and, in the light of his experience and observation, he says to all young teachers, solemnly and earnestly, take the advice of Iago,—it is good counsel,—Put money in thy purse.

How is it to be done? Nothing is easier, if you go about it in the right way. Lay your plans, be systematic, and let no trifling thing turn you from your purpose. Who is there that is teaching a small school in a country district, even at the meager wages paid for such service, who cannot lay by fifty cents a week, if he will? Let him provide himself with a tin "savings bank," such as children use, and on a certain day of each week put into it fifty cents, if he cannot put in more. At the end of three months, let him take out the six dollars and a half and put it in a real savings bank, where it will shortly begin to accumulate for itself. Continue this for the year and for every year. If the interest that accumulates in the bank is not withdrawn, it will soon be added to the principal, thus giving compound interest. Suppose the rate of interest is five per cent. only, and that the additions to the principal are made every year;—I am not going to tell you what the sum will amount to in five years; but take your pencil and figure it out for yourself. You will find that it amounts to quite a "nest-egg."

The reasons why most young teachers do not save money are principally three: First, a dislike to forego present gratification of some kind, for future good. Too often this does worse for its victim than to prevent his saving anything; he suffers it to plunge him into debt, and to keep him there hopelessly. The wise man of old well said, "The borrower is slave to the lender." Second, when his income is small the amount that he can lay by must be proportionally small; so he allows himself to regard it contemptuously, and saves nothing. Perhaps, he comforts himself with the thought that he will make up for it by and by, when his income is more liberal. Fatal delusion! If he spends up to the full amount of his income for the first five years of his teaching life, it is almost inevitable that the habit will cling to him to the end: and, if his salary increases, he will allow his expenses to increase in an equal or greater ratio.

Third, too many people measure their expenses, not by their income, nor by their own real needs, but by the expenditures of their neighbors,—often those whose income greatly exceeds their own. An outlay which would be moderate for one receiving a thousand dollars a year, would be shameless extravagance for one who receives only four hundred. The first step, not only towards a fortune, but towards true manliness,—perhaps, it may be necessary to simple honesty,—is to measure outgo by income, and by that alone, taking care that in *all cases* the latter shall exceed the former. How many things in this world are spoiled because they are measured by the wrong standard! To set up the right standard and then adhere rigidly to it, not only produces the desired specific effect, but lays the foundation for a character of manliness and integrity.

When the accumulation has become a respectable little sum,—a few hundred dollars,—it may be put where it will increase faster. But do not gamble with it, do not attempt to speculate. Do not buy fancy stocks nor corner lots; but put it out to some safe customer *on good security*. Collect the interest every year, and put it with your weekly savings, and do the same thing with the resulting hoard. In this way, extraordinary misfortunes aside, any one may, in a few years, become the possessor of the nucleus of a fortune.

Do you ask why I advise you to save money? Not to incite a miserly spirit; not to recommend an undue love for riches; not to suggest that the thing of chief value in the world is money,—for none of these reasons, but simply as a matter of self protection. I have heard of a clergyman who, when he was going abroad to preach, used to borrow ten dollars, if he happened to have no money of his own,—and this, though he had no occasion to use money, and often returned the same bill that he borrowed. The reason he gave was that he could preach more independently and fearlessly with ten dollars in his pocket. Now, however it might be when the money was borrowed, I am sure that his statement might be true if the ten dollars were his own, and he was free from debt. And it is precisely on this principle that I advise all teachers to become possessors of money, even though the sum be a moderate one.

Of course, there would exist the same reason in a greater or less degree for giving this advice to any young person; but it applies with special force to the teacher. It is the bane of our profession that its members are so often obliged to change their field of labor. Very frequently this evil would be lessened if the teacher could take a more manly and independent course than his pecuniary circumstances seem to justify. Our schools are

under the control of men who are often chosen to their place for no fitness of theirs, but for very unworthy reasons, and the teacher has frequently to endure treatment from his superiors that he would not submit to for a moment were it not that he cannot afford to forego his salary even for a month. How many teachers in Illinois are there to-day, poor men with families, who are completely at the mercy of their directors and boards, bound hand and foot, simply because each month's salary is absolutely necessary to keep starvation from those who are dear to them! And there are plenty of men in authority who are just mean enough to take advantage of such a state of things. The result is that there is tyranny on the one hand and slavery on the other, and the worst sufferer after all is the school itself. No man is likely to teach a good school who cannot go straight forward in a manly way, to do what his judgment tells him is the best thing. The possession of a few hundred dollars may make the difference between a manly, professional workman, who has wise plans, and goes forward to realize them, and a cringing slave, subject to the whims, contempt and petty meannesses of men who are infinitely below him in the intellectual and moral scale.

A little wise forethought and self-denial in his youth would have furnished the safeguard, and would have enabled the teacher to compel respect where he now receives only injustice and contempt. Therefore, young teacher, "Put money in thy purse."

AN OLD BOY.

HIGH SCHOOLS.—I.

In some quarters it is fashionable to attack the High School as an expensive luxury, an unnecessary, unauthorized appendage to our free-school system, on which we have no right to expend public money. For this reason the legality and necessity of the High School, as an integral part of our public-school system, is the first question to be settled; for if High Schools are not necessary, or, if necessary, do not come within the meaning of the law when it provides for free schools, then we certainly shall not advocate their establishment in townships, or elsewhere.

The law under which our schools are organized is entitled "An act to establish and maintain a system of free schools"; nowhere in the law do we find specifications as to the grade of these schools. The term "common schools," so often used by the opponents of High Schools, and used as though quoted from the law, nowhere occurs in the law. The framers of our school system wisely left the question, what grade of schools can be sus-

tained by public funds, to be answered by the people of each district for themselves. This settles the question, "Have we a right to appropriate public money for the support of any schools other than elementary ones?"

Granting their legality, are they necessary? This is the vital point, for unless we can prove the necessity of the High School, its absolute value to all classes in the community, its mere legality counts for nothing. If it does not directly or indirectly contribute to the greatest good of the greatest number, its warmest friends must acknowledge it has no right to be supported by public money.

We argue that the High School is necessary, both directly and indirectly to all classes. 1st. Directly, because the demands of modern life make a knowledge of those studies pursued in the High School absolutely essential to the highest success in any calling. When the farmer reaped his grain with a sickle, and his wife made his homespun clothes, to the monotonous music of the "Stitch, stitch, stitch," of HOOD's melancholy song, a knowledge of the three R's may have been all-sufficient. But now, when every farmer in the land has his reaper and mower, and many of them their steam engines to grind and cook the fodder, while within doors are labor-saving machines innumerable; when our very cook stoves are so complicated one needs to be an engineer to run them; when "the old oaken bucket" has given place to pump and hydrant; when hydrostatics, hydraulics, optics, magnetism, electricity, assert their existence and their right to be, in the commonest vocations, it becomes necessary for our children to be well versed in philosophy.

Again, so long as men swung the ax in the forest, or followed the plow in the open field, returning to homes through whose unchinked cracks the free winds of heaven blew, and whose roaring fire-places were the best possible ventilators, it mattered little that they had never so much as heard the word ventilation; they had it, without the asking, and with it, health, strength and length of days. But in our air-tight houses, heated by air-tight stoves, such ignorance becomes the price of blood. This becomes doubly apparent, when our population, instead of being scattered over vast areas, a family to a quarter section, is collected into towns and villages; crowded into factories and shops. Thus circumstanced, we must know and obey the laws of physiology or pay the penalty with strength or life.

Again, the virgin soil, with its garnered richness of centuries, needs no fertilizers; it has but to be tickled with the plow to laugh into a harvest; but as generation after generation of crops is taken from it, it becomes exhausted, and science must come with subtle analysis to tell what the wearied

earth-mother needs for her recuperation. GRAY's ideal plowman who stolidly "plods his weary way," must wake up, shake himself, study the chemistry of the soil, the botany of his wheat, corn, and potatoes, if he doesn't wish this wide-awake age to run away from him, or to snatch all the profits away, right from under his half-shut eyes.

The same thing holds true in all mechanical pursuits. Science has taken possession of our mills and work shops, showing a more excellent way of performing the simplest operations than by mere brute force.

The wonderful progress of the century in mechanical invention becomes an element in the problem of popular education, which we cannot safely neglect. The avowed object of our free-school system is so to train the boys and girls that they shall become efficient men and women, hence, valuable factors in the Commonwealth. On this, and on this *alone*, is based our right to public funds for schools of *any* grade; if our schools do not give such training as shall make valuable citizens for the State, they have no right to be supported by the State. We contend that such training as the true High School gives is just the training necessary to furnish the State with valuable, because intelligent, workmen and workwomen in the various departments of modern mechanical labor.

It is not alone "the bayonets which think" that gain the day; thinking plows, thinking hammers, thinking spindles, thinking looms are just as sure to win the victory in the battle of modern life, as were the thinking bayonets to win it at Sedan.

Science is now prince of the realm. Yankee ingenuity, obeying the behest of science, has devised machinery to perform, better than human hands can do, a large proportion of the physical labor of the world; our future citizens must be trained to understand, control, direct this machinery, or they will be crushed beneath its resistless wheels. We must teach them the philosophy of these mechanical forces, so that they may be able to control these genii of the farm, the shop and the fireside, which human ingenuity has evoked. Nor can we stop here; we must train them to study out the philosophy of various occurrences around, the "reason why" of what they do. No one denies that he who thinks out his work, and works out his thought, works the better for that thinking, as well as thinks better for that working.

How else can we explain the fact so familiar to intelligent, efficient housekeepers, that we can accomplish so much more, even in their own department, than our domestics, though they be physically stronger than we and have had much more manual training. We have often seen them stand,

with opened-mouthed wonder, at the ease and rapidity with which their educated mistresses "turn off" work. The difference comes from difference in brain-power: the well trained brain acts, perhaps unconsciously, upon the fingers. There is a most intimate and subtle connection between the brain and the hand, and allow me to say, the hand is not the only gainer by the copartnership. That mistress returns to her books or her pen all the stronger *intellectually* for that little episode in the kitchen.

To come back from this digression, in which one of my hobbies came near running away with me. By a similar train of reasoning, we can show that modern life demands just such foundation-work in all the sciences as our High Schools are established to do. The study of Biology, in both its departments, of Botany and Zoology, of Chemistry, of Geology, of Mathematics, especially as applied to mechanics, — some knowledge of all these is necessary for the working men and women of this generation, and will be doubly necessary for those of the next. For the world and its industries broaden every day; greater possibilities, ay, and greater responsibilities await this generation than their grandfathers ever dreamed of. We must take the world as we find it, not as our grandfathers left it, and we must prepare the boys and girls of to-day to act well their part in the grand to-morrow just dawning for them. "But let the colleges do this work." Practically, the colleges are shut against the great army of workers who earn their bread by the sweat of their brow. The time required for a college course, to say nothing of college bills, is a heavier tax than these workers can afford to pay; the High School is, and ever must be, the workingman's college. Its opponents are fond of railing at it as the place where the rich man's children are educated at the expense of the poor: those who have studied the matter know that just the reverse is true. In the first place, property, not population, is the basis of taxation, hence the rich man pays for the tuition of not only his own children, but for that of the children of his one, two or a dozen poor neighbors, who have no property with which to pay for their own. And he can well afford to do this, for the value of his property depends, in large measure, on the intelligence and morality of the community,—the very things good schools foster. What was the value of real estate in Sodom?

Then many of the children of rich men go to college; to fit for college, they leave the High School and go to academies and other private preparatory schools. For, as our High-School courses are arranged, as doubtless it is wisest to have them arranged, High Schools are not fitted to prepare boys for the classical course. The fact that few of them include Greek in their course sets this matter at rest.

But they are fitted to prepare those who are to bear the burden of the physical labor of the State for their life work. And by this very class are they most largely patronized. I speak advisedly on this point, having lived all my life in a College town, where there is an excellent High School, and and having taught ten years in the High School, and four in the preparatory department of the College. I have closely watched the workings of both, and feel no hesitation in saying that of those who attended the High School, not more than twenty per cent. would ever have enjoyed the privileges of anything beyond elementary instruction, had they not received it through a *free* public school.

If there is one institution which poor men should defend at all hazards, standing shoulder to shoulder against all its opposers, it is the High School.

2d. Indirectly, the High School benefits all classes by the influence it exerts on the schools below it. As Dr. Bateman says, it is an awakening and quickening force which is felt through the lower grades. Its power to excite the mind to press forward, to make greater efforts, is of more value than all the books which can be placed before a pupil. Eliminate the High School from our system of public instruction, and the other schools would inevitably deteriorate.

MARY ALLEN WEST.

THE GRADED SYSTEM.

No subject has attracted more attention during the past two years than that of Gradation of Schools. It is claimed that the "Graded System" cripples the advancement of pupils, in that it prescribes a uniform rate of progress for pupils of different degrees of ability, and determines this uniform rate by the ability of those who possess the least mental activity. It is further claimed that it deprives the pupils of the best labors of their teachers, since the teachers are not at liberty to use their individuality, but must work after a uniform plan prescribed by some higher authority. Still further, it is claimed that the system demands certain Procrustean tests in order to advancement. A school organized under such a system as is in the mind of the objector, may be represented somewhat after this fashion. A building has several rooms of equal size. Each room has the same number of seats, varying in height to suit the growth of those who are to occupy them. Between the rooms is a close partition, having in it one door. As the result of a thorough examination,

each room is filled by pupils of equal attainments. The doors in the partition are then closed and bolted. Each pupil then has placed before him a certain number of pages of a Reader, a Speller, a Geography, an Arithmetic, etc., more or less of these as the grade demands. The teacher has in her hands definite instructions as to the work she must do, and a prescribed plan for its accomplishment. Her instructions are faithfully studied, and the progress she makes in their accomplishment is daily compared with the calendar. Upon a fixed day the door between the rooms is opened, and all who can give a prescribed per cent. of correct answers to questions drawn from the text-books within the limits of their grade, and propounded by the stern examiner in the doorway, pass through. All others are sent back to go over again the prescribed course. The door is again bolted, and remains closed for six months or a year, more or less.

Such a theory of the Graded System has, I regret to say, to a limited extent, the foundation of fact. The total annihilation of the system is demanded by the objector. The walls of partition must be broken down; pupils and teachers must be left free to rove at will over the whole building, picking up here and there such topics of study as best suit their fancy. No classification must be attempted, for thus the individuality of the pupil would be sacrificed to the minimum ability of the class. Under such a want of system those who need the least attention secure the most, for the brighter pupils are most attractive to the teacher, who is not hindered from following her own inclinations. Some pupils will, of course, progress more rapidly than under the rigid system supplanted. Many weak ones will still remain timid, distrustful and stagnant. Inefficient teachers will be well pleased, for no figures will be brought to prove their inefficiency. They can spend most time upon that which is best understood, whether it be most important or not, and no incentive to study and self-improvement is felt.

Can the evils that are possible to the Graded System be corrected without the entire destruction of the system? If so, will the good that remains compensate for the effort at correction?

The answers to these questions must help to the solution of a problem now widely discussed.

The individual instruction lacks the stimulus of emulation. Every child does better if stirred to effort by the competition of his fellows. Within reasonable limits, numbers improve the scholarship of the individuals in a class. Each is helped in his own thought by the different phases of thought presented by his mates. So far as each may be helped and none hindered, classification is an advantage.

In most cases, instruction may be given as successfully to a class of about equal attainments as to an individual. In other words, the instruction given to an individual pupil loses nothing of force to the individual if heard by many others, and is of as great value to each of the many as if given individually. Economy, therefore, favors classification, if class bands are elastic and flexible.

The possibility of higher attainment, which gradation makes apparent to a child, serves as a healthful stimulus to study. The strength given by an achieved success in passing a step higher is not of small account. The opportunity afforded for adaptation of teaching talent to its best field for labor, is one of the strongest arguments in favor of gradation.

Such are some of the prominent advantages of a graded system. Over against these may be set the danger of crippling the individuality of the child by binding him down to the speed of the least active in his class.

The advantages are inherent in the system. If the danger be equally inherent, the system should be discarded.

But it seems to me that the danger lies in improper administration, and may be entirely averted.

This much must be premised. Close gradation and classification demand large numbers of pupils. It has been assumed that what is good for a school of 1,000 pupils, is of equal value to a school of 100. This assumption has led to great abuses. The closest gradation is profitable only in cities and larger towns where there may be easily found as many pupils of about equal attainments, as it is proper to put under the charge of a single teacher.

Some machines employed in the manufacture of material products are so nearly automatic, that they may be trusted to do the work assigned them, even in the hands of unskilled workmen. Many who have administered our educational system have assumed too close an analogy between material and intellectual affairs, and have put the Graded System into the hands of teachers with the thought, either expressed or implied, that its machinery is perfect, and needs only to be set in motion.

Machines may be the masters of material, but they are servants of mind. Since they are the product of thought, they must always subserve thought. Hence, any system of appliances in educational work must be a servant under the control of a thoughtful teacher. The teacher who declares himself but part of a great machine, at the same time declares his unfitness for the place he holds. A clearer head and a sounder discretion are needed in a graded system than anywhere else. Still further, let it be

premised that certain foundation studies are universally agreed upon as essential to a sound education. No one questions the importance of reading, writing and ciphering. The value of geography and history is well nigh universally admitted.

What then should be the prominent features of a system which shall furnish all the advantages possible, with the least liability to danger?

1. It must provide for thorough instruction in the fundamental studies of an education, with due regard to their relative importance, and ensuring the best results within reasonable time.

2. *Result* should be demanded, leaving *methods* to the discretion of the individual teacher.

3. The utmost flexibility should be permitted, so that natural differences of capacity may have full consideration—and that the advantages or disadvantages of the pupil's home surroundings may be recognized.

4. At points in the course of study, tests should be applied which shall determine the *statu* of the pupil—first as to his mastery of the topics passed over—and secondly as to his relative standing with others of his class. These tests must be solely in the interest of the pupil, and never for the benefit of the teacher. Properly applied, they furnish the pupil with knowledge of his present acquirements, and serve as a stimulus to future acquisitions. They should not be of regular occurrence at stated intervals, but at any time when the good of the pupil seems to demand them, either for information as to his present standing, or for spur to his ambition. They may touch but a single topic, as in weekly or monthly reviews, or they may embrace the whole range of topics, as in examinations for promotion from grade to grade. The examinations for promotion should differ from reviews only in the extent of the review and in the number of topics reviewed.

Thus far theory is presented. Can a practical application of the theory be made successful?—*Supt. Pickard's Report*.

(Continued next month.)

HISTORY II.

On the majority of us rests no responsibility with regard to *writing* history, we have only to teach it as now written, unless, indeed, the scholars of coming years shall bless some of our number, for having written a history containing not more than a score of dates from beginning to end, and relating the whole as a continuous delightful story, whose end cannot indeed

be guessed, but wherein each great event shall be seen as the inevitable consequence of causes which were increasing silently, perhaps for centuries,—in short teach it philosophically. The same spirit which spoke in the letters of JUNIUS was aroused when the Magna Charter was extorted from the weak hand that vainly aspired to despotism, and reached its climax when the STUARTS, that unfortunate family who seem to have been born about two hundred years too late, were deposed from the throne of their ancestors. The TUDORS, with all their kingly tempers, could not have established the Reformation in England, had not BEDE and WICKLIFFE prepared the people for its coming centuries before. But that is something that must almost invariably be pointed out to the unformed mind, for children are not thoughtful enough to see the connection between cause and effect until their attention is called to it, and not then unless it is quite plain. Though they may learn some practical knowledge by experience, they do not incline to lay up abstract knowledge by observation and deduction.

Classes, as a rule, like history, which would otherwise be dry, if enlivened by interesting stories: the chief difficulty seems to be the committing it to memory. Perhaps this trouble about remembering it is due to the circumstance that it is taught as a mass of facts, each with a date attached, apparently having little or no connection, instead of as the story of the march of civilization all over the world, showing that the true history of a country is the progress the people of that land have made from barbarism to enlightenment.

They may be made to feel that the introduction of printing into England, having as it did a literature to begin with, was far more important than any Crecy or Agincourt.

A battle is not famous for the number engaged, nor always because of the interest at stake; its moral effect is of far more consequence than the tactics employed, or the number of killed and wounded.

In order to estimate the moral effect of any great event, or course of events, we must wait until time shall have obliterated some of the surroundings which obscure the view, such as the personal influence of some of the actors, or till the bitterness of party spirit shall be buried in the grave of the past. To gain a correct idea of the symmetry of a noble edifice, to appreciate it as a whole, we must stand a long way off. If we stand close to its base, instead of getting an idea of the architectural design, nothing meets our gaze but brick and mortar. Even if we regard the chief personages in any great action in the same light as did the General of old who pointed to his army of brave men as a wall for the city, saying, "Every man

is a brick," too near a view cannot be accurate as regards the general plan. So the history of a country can scarcely be accurately related by a cotemporary. Events are then a confused mass, and we waste time over minutiae, which in a few years will be found wholly unimportant.

In the history of the United States what is the use of making scholars learn about scores of not even battles, but skirmishes, burdening their minds with such a mass of detail that the more noteworthy actions are quite crowded out? In some histories of our own country, in use for children about twelve years old, in the account of the late war, there are no less than eighty battles mentioned, and, with very few exceptions, giving the opposing generals in each. Now, it is rather doubtful whether the majority of us here could this moment mention any eighty battles in all the world's history giving the names of the leaders engaged, and the result of the action. Unless the teachers of the books mentioned had the discretion to select the decisive battle of each campaign, and concentrate the attention of the scholars on that, they are quite apt to forget all about the effect of the battle of Gettysburg, and remember perfectly the name of some small skirmish of no great consequence. So many of the actors in that struggle are yet alive, and the world is so influenced by their actual presence, that they all seem noted, yet a hundred years hence History will have forgotten many of their names.

Obviously, it would be rather inconvenient for children of the present day to wait a hundred, or even fifty years, before learning about that war, and the wonder is that anything like a correct history has been written, for one has only to read the descriptions of any event, given by two newspapers of opposite parties, to see how contradictory may be the views of a matter from different stand-points. Since children must learn of late events, and that, too, from such books as we have, their instructors must do what they can to call attention to decisive events, leaving the others out altogether, or giving them only casual notice.

Children do not seem much inclined to generalize, though there is, as a rule, a tendency to find out the reason why, "what was it all about?" being one of the commonest questions asked, and one of the most difficult for them to answer for themselves, as histories are frequently written and taught. They will know who commanded each division of the armies, and their arrangement in battle array, may even remember the plausible excuse given by a nation aiming at universal conquest, but they lose sight of the great cause that has been working for years, or the plan long before laid out, only waiting for a flimsy pretext to commence active operations.

The splendor of the careers of some of the great soldiers of history has a dangerous effect on the minds of the young, particularly boys, by making them think that the greatest glory life affords is to be found on the battle-field. Unless driven there for the defence of the right, the soldier is a barrier to civilization. In the olden time, the army was the great arena in which to seek distinction, and philosophers, statesmen, orators swelled its ranks. PLATO, SOLON, DEMOSTHENES, sought a military life as a matter of course. Every man fought in those days, but as the world grows older, intellectual men are shrinking more and more from war, from the noblest motives, and military genius is losing somewhat of the high esteem in which it was formerly held.

The period is outgrown when wars were a weekly occurrence. Now nations hesitate before engaging in strife, which, while it may rouse all the most energetic faculties of their nature, sacrifices too many noble lives which might do the world so much good in some other way. War seemed glorious so long as people knew no better, but, happily, arbitration is gradually taking the place of the hand-to-hand conflict. The encroachments of knowledge are slowly turning the highest intellects towards the arts of peace, away from war and persecution, which have been rightly described by BUCKLE, one of the profoundest thinkers of the age, as "the two greatest evils with which the ingenuity of men has yet contrived to afflict their fellow creatures."

M. A. WAIT.

STATE EXAMINATION.

1875.

PHYSIOLOGY.

1. Describe the human skeleton, giving the number of bones, and their three principal uses.
2. Describe the hip joint and the femur.
3. Give the use and composition of the muscles.
4. Describe the skin; give its functions.
5. Describe the hair and nails, and the process of their growth.
6. Describe the mucous membrane.
7. Give an account of respiration.
8. Describe the circulation, the heart, the arteries, the veins. Describe the plasma or blood disks, and give the materials of which they are composed.

9. Give an account of digestion, and follow the food until it passes into blood.

10. What is the nervous system? the cerebrum? the spinal cord?

BOTANY.

1. What are the principal functions of the roots of plants?

2. Describe the circulation of sap. What is its office?

3. Give a description of the flower of a plant. What is its office?

Name its parts.

4. Give a description of the ovule and its office.

5. What is a seed; how formed and of what composed?

6. Describe the leaf, give its office. Name five forms of leaves.

7. Describe an Endogenous and an Exogenous plant.

8. What is venation? Give the three leading forms of reticulate venation.

9. Of what does vegetation consist? Name the four kinds of cells.

10. What is Botanical analysis? How would you proceed to analyze a plant in flower and fruit?

SCHOOL LAW.

1. Describe briefly the school system of Illinois. What school officers are required?

2. Whence does a teacher derive his authority to govern and manage a school? Who is authorized to make a course of study?

3. What two things are absolutely necessary to enable teachers to draw public money?

4. Give some of the advantages to the teacher from having a written contract with directors. What is the legal month, and what days are legal holidays?

5. What is the law in case of a tie-vote at a district election for school directors?

6. What officers can call a special school election?

7. Whose duty is it to file schedules with township treasurers?

8. Under what conditions do schedules bear interest?

9. What is the law as to duplicate schedules in case pupils attend school from two or more districts? In case the district lies in two or more townships?

10. What is the penalty for teacher or school officer who has an interest in the sale of school books, furniture, etc., in the district with which he is connected?

PROCEEDINGS OF THE EIGHTH ANNUAL MEETING OF THE
SOCIETY OF SCHOOL PRINCIPALS, HELD AT ROCK
ISLAND, ILL., DEC. 28th AND 29th, 1875.

The Society convened in the High-School room at 10 o'clock a. m., the President, P. R. WALKER, of Rochelle, in the chair.

The Secretary being absent, J. S. McCLUNG, of Delavan, was chosen Secretary, *pro tem.*

Devotional exercises were conducted by H. L. BOLTWOOD of Princeton, after which the Society listened to the address of the President.

W. B. POWELL, of Aurora, moved that when this Society adjourn it adjourn to meet in July, 1877. The motion prevailed.

Upon motion, E. C. SMITH, of Dixon, was then called upon, and presented an able paper upon the question, "What shall we teach?"

A spirited discussion followed; Messrs. BOLTWOOD, of Princeton, KIMBALL, of Elgin, H. H. L. SMITH, of Polo, HARTWELL, of Dixon, COOK, of Normal, and HALL, of Princeton, took part.

Upon motion, the President's Address was referred to a committee consisting of Messrs. COOK, GASTMAN, and REGAN, with instructions to report at the evening session.

The President then announced the following standing committees:

On Nominations.—E. A. GASTMAN, of Decatur; C. F. KIMBALL, of Elgin; J. M. PIPER, of Mt. Morris.

On Resolutions.—H. L. BOLTWOOD, of Princeton; T. H. CLARK, of Aurora; I. E. BROWN, of Decatur.

On Finance.—M. L. SEYMOUR, of Blue Island; J. G. SHEDD, of Macomb; O. T. SNOW, of Batavia.

Adjourned until 2 p. m.

Afternoon session called to order by the President.

It was moved, and carried, that the evening session of this Society be held conjointly with the session of the Society of County Superintendents.

W. B. POWELL, of Aurora, read a paper upon "Teachers' Meetings." The paper was discussed by Messrs. WHITE, of Peoria county; COOK, of Normal; COX, of Farmington; J. M. GREGORY, of the Industrial University; BOLTWOOD, of Princeton; W. H. SMITH, of Bloomington; WILKINSON, of Buda; ROOTS, of Tamora; H. H. L. SMITH, of Polo; GASTMAN, of Decatur, and HARTWELL, of Dixon. A

The President declared a recess of five minutes.

After the recess, C. P. HALL, of Princeton, was elected Treasurer, *pro tem.*, Mr. DELANO being absent.

The Society then took up the discussion of the question, "Upon what principle shall we proceed in planning a High-School course of study?"

E. A. GASTMAN, of Decatur, led in the discussion, and was followed by Messrs. KIMBALL, of Elgin; SMITH, of Polo, and HALL, of Princeton.

Upon motion, all business was deferred until the evening session.

At 7:30 p. m. the Society, in conjunction with the Society of County Superintendents, assembled in the Central Presbyterian Church.

A. HARVEY, of Paris, read a paper upon the subject of "Outlines."

Moved to adjourn to meet in Dart's Hall the next morning, at 9 o'clock, for the transaction of business. Carried.

WEDNESDAY MORNING, Dec. 29.

The Society met pursuant to adjournment, the President in the chair.

The Committee on Nominations reported as follows:

For President—M. L. SEYMOUR, of Blue Island.

For Secretary—H. H. L. SMITH, of Polo.

For Treasurer—J. G. SHEDD, of Macomb.

For Executive Committee—M. ANDREWS, of Galesburg; C. E. MANN, of St. Charles; A. HARVEY, of Paris.

The report was accepted, and committee discharged.

On motion, the President was requested to cast the ballot of the Society for the gentlemen named as the officers for the ensuing term. They were declared duly elected.

The Committee on School Statistics, appointed at the meeting in Champaign, to report at this time, submitted the following: (See p. 110.)

The Committee on Finance reported favorably upon a bill of the ILLINOIS SCHOOLMASTER, which was ordered to be paid. The committee was discharged.

The Treasurer reported as follows:

Cash in treasury, as per previous report.....	\$72.42
Received in dues the present session.....	25.00
Total receipts.....	\$97.42
Paid by order of the Auditing Committee.....	8.00
Cash in treasury.....	\$89.42
(Signed.)	C. P. HALL, Treasurer. <i>pro tem.</i>

The report was accepted.

Upon motion, the Society adjourned to meet in July, 1877, at the call of the Executive Committee.

P. R. WALKER, Pres.

L. GREGORY, Secretary.

EXPRESSION IN READING.—III.

As one may read with some degree of readiness, and have little idea of the meaning, so one may have a very clear idea of the meaning and read miserably. I speak now, of course, of audible reading. If any one doubts the truth of the above statement, let him keep his ears open when the next sermon is read in his hearing. It then becomes necessary to teach *expression* in reading.

But little attention is paid to this outside of the graded schools, and little systematic work in most of them. If the pupil can manage to stumble through his paragraph or stanza, he is permitted to rest upon his laurels—

that's glory enough. I heard nothing of it in the years that I spent in the district school. If our reading conveyed an idea entirely foreign to the one intended, it was all the same. We never knew it, neither did most of our teachers. "The well of St. Keyne," a poem in one of the old readers, contains a stanza which runs as follows :

"St. Keyne. quoth the Cornish man, many a time.
Drank of this crystal well.
And before the angels summoned her.
She laid on the water a spell."

The last line received the following treatment :

"She laid on the *water* a spell."

I always imagined her some nymph of the fountain who imparted wonderful virtues to the waters by reclining upon them before she departed or her saintly abode. Years passed, and although I had learned more of *lay* and *lie*, I had not thought of the poem. I chanced to hear a public reader render the same line.

"She laid on the water a *spell*."

It meant something quite different.

In what I am saying, I have no reference to what is technically called "elocution." That is not the work needed by the children of the common schools. As well might the teacher attempt to teach all to play the piano.

The children should learn how to express with clearness and precision the exact thought of the author, so that the meaning shall be *forced* upon the hearer. No cumbersome list of "rules" and "styles" is needed. They have their mission, but it is not here.

What shall we do ?

First, the text must be fairly understood. Here is of course the guide to expression. If it is not understood, the proper expression is a mere accident. The best evidence of the pupil's appreciation of the meaning is his ability to state in his own language what the writer intends to say. Paraphrasing, or "reading between the lines," is an exceedingly valuable exercise.

Second : This done, the teacher must appeal to the child's consciousness of what different forms of expression mean. They make few mistakes in their common speech. If they can make the author's thought thoroughly their own, and forget that they are *reading*, the result, in most cases, will be reached.

How shall the proper expression be secured ?

Not by imitation. Reading in that manner is empirical. The memory only is exercised. Sentences should be read in a certain way, not because the teacher so reads them, but because the thoughts are expressed by that

treatment. "Parrot" reading is a serious error. "But suppose the child reads incorrectly?" Then questions should be asked which shall lead him to correct speech in answering. Here is where skill is most needed. If the two points touched upon in the preceding papers have been properly attended to, the teacher will succeed in nine cases of every ten.

Colloquial pieces are best adapted to this work. If the class is especially backward in this part of the work, selections must be used which give constant drill in this particular. For a few cents each, books can be obtained that are full of such exercises. If these cannot be obtained (a barely possible condition), the teacher may remember that he is not obliged to use the lessons in his reader in the order in which they are printed. There are no practical difficulties that a teacher who is full of his work cannot surmount. Sentences not in the lessons may be selected and copied by the pupils. Take the following as an illustration. Dickens in speaking of the treatment of the Regicides, by Charles II, says: "But even so merry a monarch could not force one of these dying men to say that he was sorry for what he had done." Read it so that it shall mean that he could force all but one; that he could not *force* them, but could induce them in some other way; that he could force all but one, and that he could induce him in some other way: that he could force none of them, etc.

The work is slow at first, but when the idea takes hold of them there will be no lack of material. A moderate amount of pupil-criticism is valuable. When, however, a criticism is made, the pupil should state the exact error,—what was meant by the expression given, and wherein it failed to convey the exact thought.

This topic will be resumed in a future article.

SPELLING.

MR. EDITOR: — I noticed, in the November No. of *THE SCHOOLMASTER*, some remarks upon the above, taking exceptions to what the writer deems the "old habit of pronouncing;" and, naturally enough, in your next issue we find some one thinks it well enough to keep the "immaterialities" separate. My observation has been, that the two teachers referred to are both correct in their views. It would hardly be the best thing for any set of scholars, whether in "Egypt," or Palestine, I think, to adopt either method to the exclusion of the other. I think they will find it generally better to have beginners in spelling pay some attention to the division of syllables.

Very often, children will get a very much better or clearer idea of the word if they divide it into its syllables in spelling.

For instance, take the word "solution," a great many "Egyptians"—and they may be found in any school—would become lost entirely by endeavoring to spell it through without stopping, while if they should spell the syllables separately thus, s-o so l-u lu solu t-i-o-n shun solution, it would become easy. It has somewhat the same effect as the analysis of an arithmetical example; it brings it before the "mind's eye" in its component parts, which are much more easily recognized by the undrilled mind than the word as a whole. I wish these remarks to apply especially to "beginners," and the primary classes in spelling. After a child has spelled far enough to come to "immateriality," and words of such class,—for, I take it, that the scholar must be pretty well advanced to be spelling and understanding such large words,—he should be able to comprehend the word in its fullness, and could doubtless sing out the letters one after another without stopping at the syllables. Until, however, the mind has received such culture and strength, by spelling and reading, as to enable it to grasp the word and idea with some assurance, it would seem better to teach the child to spell and divide into syllables. There is no rule, however, by which one can be governed, as the disposition and ability of the pupil must, in the discretion of the teacher, decide what is best. In regard to the manner of teaching children how to spell, it is doubtless conceded by most teachers that writing is the best way. However, this will not always do in the primary, as there are many children, especially in the country schools, who can spell long before they can write, owing to the not too close attention to spelling, but to the neglect of writing. It has been my custom whenever time would permit, to set the children to writing the words on the board, or as I would pronounce them, even if there were some that did not know all of the script letters. I usually have a copy of the letters on the board, and then stand ready to assist any one in the formation of any letter. By this means, in the course of fifteen or twenty minutes, the class can write and spell at least five words, which is fully as many as they would each spell were they to stand in a row and "spell round." This combines a writing with a spelling lesson without any derogation to either, but rather an advantage to both; and I have found the method whenever tried to give good results.

G.

DIVISIBILITY OF NUMBERS.

Divisibility by four can be demonstrated in the following manner:

Any number of more than two places is composed of some number of hundreds, and the number expressed by the two right-hand figures. Since one hundred is divisible by four, any number of hundreds must be so divisible, because a divisor of any number is also a divisor of any multiple of that number. If the number expressed by the two right-hand digits is divisible by four, the whole number is so divisible, for a divisor of two numbers is a divisor of their sum.

Substitute "thousand" (or "thousands,") for "hundred" ("or hundreds,") and "three" for "two" in the above, and you have a demonstration for divisibility by eight.

Again: Any number may be separated into two such parts that one will be a multiple of nine, and the other the sum of the ones expressed by the digits. If the last named sum is divisible by nine, the whole number is, since a divisor of two numbers is a divisor of their sum.

EDITORS' DEPARTMENT.

We are in communication with a few excellent teachers who wish to change locations. We shall be glad to assist our friends at any time by putting into communication those desiring places and those wishing teachers.

We publish in this number, the revised rules for attendance reports. If any who wish to report have been overlooked in sending out the rules, we will mail them on application. See that the reports reach us by the 15th of each month.

Who has not observed the readiness with which pupils imitate their teacher, especially if he be marked by special peculiarities! If looseness in dress or speech be his characteristic, ten to one his pupils will mirror his faults. Some teachers affect peculiar forms of address, and pride themselves upon their freedom from the ordinary restraints of etiquette. We have heard of teachers of much vigor and considerable success, who indulge themselves in expressions that are more fitting to the mine or camp than to the recitation room,—such as "You talk!" "Make your mouth go!" or, "—You"—with a significant thrust of a dexter digit. That the pupils do "talk"

and "make their mouths go" is evident enough, but success never should be associated with pure mannerisms. Such teachers succeed in spite of their faults, and it is a question whether the carelessness of expression engendered is not more than an offset to the good accomplished.

Slang is on the increase, apparently. A few minutes spent as a quiet visitor on most play-grounds will convince one that our English is suffering an inflation that would make glad the heart of the veriest anti-resumptionist. Some have such a dread of being "schoolmasterish" that they become, in their recoil, simply boorish. In our school-boy days, we knew a few teachers so painstaking and accurate that we pitied them,—thought they must *ache* from actual over-goodness. But those almost faultless models are a daily reproach to us now, and we feel their chiding presence at our elbows when we consciously lapse from our ideals.

We cannot be too careful. Colonel INGERSOLL is credited with the remark that if he had disposed human affairs he would have made health catching instead of disease. Had the facetious Colonel thought twice he might have discovered that he couldn't better it. Health *is* catching. Pupils are as ready to imitate our virtues as our vices, and, as we have remarked many times in these pages, that teacher who sends his pupils from his presence impressed with a feeling that the little amenities we call politeness are of vital importance, though he has not made them masters of all "ologies," has done a noble work by far than he who has cultivated the intellect alone to a far higher degree of power, but has omitted "The weightier matters of the law."

The *N. E. Journal of Education* gives President ELIOT a good, vigorous overhauling for his attitude toward public High Schools. The worthy President will doubtless find himself the recipient of more than one such gentle attention before he is a year older. He is very fearful that the lower grades are to be the losers if the High School survives. It seems a strange utterance from the head of old Harvard. Should a western college president assume so hostile a position, his prospects would not be enviable. We have no disposition to argue the case here, as Miss WEST has done that in the present number, with her characteristic vigor. We do not know how the public pulse beats in Massachusetts, but it is toning up mightily in Illinois in that particular. Give him some more, Brother BICKNELL!

President GRANT excels in the art of terse expression. "Let no guilty man escape" is to the point. When men who can count their wealth by hundreds of thousands are assigned quarters in the State prison as if they were

impecunious thieves, one takes heart, and concludes that, after all, "there is a God in Israel."

May the good work go on! The revelations made in these whiskey trials are horrible enough, and exhibit a demoralization that is sickening to witness, but if we can have a few more convictions like those in St. Louis, we shall not utterly despair.

One of the worst vices to which schools are subject is lesson-stealing. Pupils present themselves at the recitation seats, and with lessons unprepared, trust to their dexterity at glancing into their text-book to help them through the ordeal,—if it is one. Few things will so effectually lower the moral tone of a school. Pupils should understand that such recitations are *lies*. The habit of prompting is no better. Sympathetic classmates carry the unprepared pupil through the recitation and imagine they do no wrong. Teachers cannot be too vigilant. These evils open the door for all kinds of looseness to enter. There can be no tendency toward vigorous manhood or womanhood where such pernicious practices are at all general.

JAMES T. FIELDS, in delivering a brief address to a school recently, said: "The great bane of American scholarship is the lack of accuracy. Moderately accurate scholarship is like a moderately good egg,—nobody wants it."

Will our friends in the district schools think of this matter? No matter how little you teach your pupils, insist that what they do know they shall be sure of. Let the line between the known and the unknown be so clearly fixed that there shall be no doubt as to where it lies. A positive, prompt "I don't know" is worth a thousand vague impressions

"What is the best method of teaching arithmetic?" asks a correspondent. Put the following interrogatories into the same list: What is the best method of training children? of running a railroad? of editing a paper? of preaching? of practicing law? of *living*? etc., *ad infinitum*. There are no best methods. There are many that are good. When we have found the best we are ready for our ascension robes. The science of teaching will then be a finished book; pedagogics will be a squeezed orange.

Think! analyze your methods! Bring them to the bar of common sense and try them by its searching tests.

Determine, in the first place, what you expect to accomplish in each of the branches you teach. Fix your desired ends, and judge your methods

by what they achieve. The teacher should be an analyst. The ideal results are the acids with which to try daily efforts "Wise men change their minds; fools, never." Who doesn't wonder why an indulgent public permitted him to teach as he did five years ago! When one ceases to ask himself "Why do I do this?" he is on the summit-level or the down grade.

We find the following advertisement in the columns of a prominent religious newspaper:

"\$1,200 profit on \$100 made this month in *Puts and Calls*. Invest according to your means. \$10, \$50 or \$100, has brought a small fortune to the careful investor. We advise," etc.

Another notice of similar tenor appears in the same column. We have picked up two other religious papers, generally excellent in character, but which are disgraced by like rascally advertisements. Of course, the sole purpose of these advertisements is to induce the inexperienced to venture into *gambling* operations. The appeal is made to the desire to get *something for nothing*,—the *root-principle* of all the gambling, forging, embezzling and thieving in the country. If the partaker is as bad as the thief, how stands the matter of honesty with these good people, who, for pay, publish these decoy notices? How much better are they than the "bunko-steerer" or "roper-in" on the streets of New York or Chicago? We cannot see any perceptible difference. Is it any wonder that the land is full of corruption and rottenness,—that honest business men feel almost as though business integrity is a thing of the past, when high-toned religious newspapers, for a few paltry dollars, lend their influence to such nefarious schemes? Why not advertise lotteries, horse-races, roulette-tables, farobanks, counterfeit money, and all the rest? They are all based on the same principle,—to get something for nothing. Religious newspapers that advertise gambling concerns, and churches that gamble at their church fairs, cannot very consistently blame ordinary sinners if they play poker, forge notes or rob banks.

The SCHOOLMASTER does not claim to be a religious journal, but it does claim to possess common honesty; and we think the gamblers of Wall street have not made money enough yet to buy us to advertise their thieving schemes. We have something that answers as a conscience still left us.

On the evening of Saturday, the 12th of February, three or four boys, loafing about a railroad station in McLean county, got into a quarrel. As a result, one sleeps in his grave, while two others are locked up in the county jail awaiting trial for killing him. On the same evening, in DeWitt county, two boys quarreled, and one shot the other, inflicting a dangerous wound.

Is there any moral to be drawn from these sad occurrences? Doubtless, there are several. Don't carry concealed weapons, says one. Don't give way to your passions, says another. *Don't loaf*, say we. Here is the great root of the trouble,—idleness. It is the occasion, if not the cause, of most of the quarreling, drinking and crime. People whose hands are full of useful work, and who are bent on doing it, are safe from a thousand temptations that beset the idle. An idle brain is the devil's work-shop, says the proverb; and idle hands readily become the willing instruments of mischief. And when one, in traveling through our country villages, observes the idle, gaping crowds around the saloons, groceries and railroad stations, he need not wonder at the frequent reports of crime. The wonder is that there is not more crime. For, of all the worthless creatures on earth, none is so thoroughly worthless as the loafer. We fancy that we can imagine some reason for the existence of fleas, mosquitoes and rattle-snakes; but, if you ask us the possible use of a loafer, we give it up,—that conundrum is too hard for us.

To remove this nuisance is the joint work of the community, the parent and the schoolmaster; and no small share of the work belongs to the last named. It has often been said that our people work too hard,—that we need more holidays. There is no doubt that many of us need to learn how to amuse and recreate ourselves more wisely. But, until that lesson is learned, pray give us no more days of idleness,—sometimes called holidays. Those we now have are a curse to the Nation.

CENTENNIAL SCHOOL SWINDLE.—Among the many impositions practiced upon the useful, producing classes, none have excelled in open audacity the attempt recently made by three gentlemen of this State, to raise money to the amount of \$10,000, or more, to defray the expenses of a few to a visit to the Centennial in a magnificent style, ostensibly to represent the educational interests of the State. It is seldom we see a more glaring exhibition of overweening assurance than is here manifested by these men, when they ask, in tones equivalent to a demand, of the county superintendents of schools to urge the teachers, and the teachers to urge the pupils, to raise the means to send them to the Centennial.

Who are the persons that are called upon to raise this fund? Three-fourths of the teachers are young ladies, who have worked themselves up to their present positions by a laudable perseverance, and are receiving a mere pittance for their services, compared with the salaries of those who expect to reap the advantages of this fund. Thousands of those who are expected to give their hard-earned money for this purpose, have never, perhaps, felt able to take a pleasure trip one hundred miles from home; and hundreds of others are supporting aged parents, or little orphan brothers and sisters, by their hard, ill-paid services in the school-room.

What greater disgrace can we expect could befall the great State of Illinois than for these men, in the presence of the assembled wisdom and patriotism of the nation, to stand up and declare that they represent the educational interests of the State of Illinois; that the State in her munificence pays them \$3,000 a year each for their services; that she has long suffered them to fatten at the public crib, but that the money required to defray our expenses here was wrung from the pockets of poor young women, and still poorer children, by the dimes and half-dimes, as teachers and pupils of the common schools.

I hope the people will be spirited enough not to pay them one cent. Let these men stay at home, or go at their own expense. No danger but there will be an abundance of worthy, voluntary representatives of the educational character. L. E. W.

The acting President of the Normal University lately received a copy of the — *Progress*, in which the above communication was found, marked

for notice. We have transferred it entire to the columns of the SCHOOLMASTER, in all its richness of simplicity, truthfulness, pathos, righteous indignation and bad grammar. To be sure, in the copy received, some attempted corrections had been made in pencil: but, as they left the syntax quite as lame as before, we directed the printer to follow the printed copy.

What a tender-hearted fellow L. E. W. is, to be sure! It almost makes us sniff to read his letter. We think we can forgive his bad grammar; if we felt as he does, we wouldn't try to write in good English. Certainly, there is no truth in his assumption, not a particle, as he might have known, if he had taken any pains to find out; but, then, that would have spoiled his pretty piece. Well, perhaps, the Centennial will not be given up, after all; at any rate, we have hopes that it may go on, if he won't put any more pieces in the paper.

But, we notice that his piece is in harmony with the general character of the — *Progress*, bad grammar and all. But, this world needs *reform* papers, and their editors and publishers must live, even if they live off of the "pittances" of their dupes. It is to be hoped that the fool-killer will delay his visit till after the Fourth of July, otherwise the decrease in our census will make a bad showing for the Centennial.

Recently, we saw a letter from a Southern State, asking for a teacher. The writer says: "I want a man who has been to a Normal school to learn to teach, and who proposes to make teaching a profession, and not a stepping-stone to something else." In our judgment, that sentence has the right ring; although, of course, we shall not stultify ourselves by saying that it is absolutely necessary to go to a Normal school to become a worthy professional teacher.

CHICAGO LETTER.

EDWARD E. WHITEMORE is dead. Such was the brief announcement which, for a moment, cast a shade of sadness over the happy faces of the 40,000 children in the schools of Chicago, on the morning of the 26th of January, 1876. The familiar form, which was known to every child in the city, had been missed for only a few months from the school-rooms, but was vividly restored in imagination, when death confronted their appalled faculties. When the tears which have been dropped on his fresh grave are forgotten, his unostentatious and honest work will live. And it will live not only in its accomplished results, but in the example and the inspiration which his character and methods are to others.

The funeral services were held in the First Congregational Church, and were attended by a vast throng—more than the magnificent building could accommodate. Simple, but true and eloquent, words were spoken over his body by the Rev.

Prof. WEBSTER of Wheaton College, the early pastor of the deceased, and by Dr. GOODWIN, with whose church he was connected at the time of his death. The organ which he loved, sweetly and sadly bade him farewell; and a hundred voices which he had trained, intoned his dirge.

A meeting of the Principals' Association was held on the day of the funeral, and when fitting words had been spoken by Mr. KIRK, Mr. HANFORD and Superintendent PICKARD, the following minutes were inscribed on the record:

"E. E. WHITTEMORE, for ten years a teacher in the schools of Chicago, died January 26th, 1876.

His associates bear testimony to his sterling worth as a teacher and as a friend. His enthusiastic devotion to his work gave him victory over great physical infirmity; his power of inspiring pupils, and his pure and elevated moral character shall serve to make us better in life and work."

Mr. WHITTEMORE, whose teaching of his specialty (music) "was a revelation" to some of the most celebrated professors of the country, was of a temperament and character to inspire the warmest esteem, admiration and friendship, and though "mute the tuneful tongue," it will be a consolation to his bereaved ones to know that he was not often misunderstood, and that he was universally appreciated.

An elocutionist who prefaced the usual comic programme by a long and serious lecture on The Good, the True and the Beautiful, used to say that he "talked sense from principle, but made a fool of himself in order to make money." It's a pity that some of the writers for educational journals do not practice similar frankness in the discovery and avowal of motives. Look out especially for the manufacturer of funny paragraphs. He may not be conscious of either the motive or result of his work, but he very frequently, with the elocutionist, makes "a fool of himself," though perhaps the elocutionist's motive is wanting, and he very rarely "talks sense" by any accident. We question the wisdom of decrying any established practice, unless it is believed to be useless or vicious, or unless we have something better to offer in its place. Young and susceptible teachers ought not to have their theories of work harshly changed by a criticism that has no *raison d'être* except the writer's desire for dubious "fun."

THE PRINCIPALS' ASSOCIATION.—This Society is one of the most marked and useful features of the Chicago school system. It is true that there are times when some of the pedagogues are inclined to mount their little hobby horses and rock for the edification of their companions. The atmosphere, however, is not congenial to such exercise, and is nearly as fatal to it as an audience of college students to spurious eloquence.

The object of the society is alleged in its constitution to be "the discussion of educational and scientific subjects, methods of instruction and discipline, and any other matter pertaining to the interests of education." The same instrument also provides that "All principals of schools, male teachers connected with the public schools of Chicago, including the superintendent, assistant superintendent, and clerk of the Board of Education, shall be members *ex officio*, and any one interested in education may become a member on application, by a vote of two-thirds of the members present, at any regular meeting."

The regular meetings of the Association are held from 9:30 to 11 o'clock a. m., on the first Saturday of each school month. The order of exercises embraces the following among other items: Remarks of the superintendent. Reports of committees. Familiar questions. Discussion, or lecture, or essay.

The subject of the latter item is selected and announced a month previously by the executive committee, whose duty it is to provide this work. The Association is found to derive great value from the facility with which it enables the superintendent to communicate his observations, suggestions and directions to the various schools so frequently and regularly. It can be readily understood that it is much easier to communicate these various little practical matters to forty or fifty princi-

pals, than to seven hundred teachers. There are usually held in the several school buildings, monthly meetings of the teachers therein, where the principal has an opportunity to call up such matters connected with the principals' meeting, as his judgment or observation indicates to be applicable to his school. The advantageous result of the Principals' Association, from this point of view, is thus seen to be that it unifies the schools of the city, and enables all to partake of the excellences, or avoid the defects of each.

Of course, the professional advantage derived from the consideration and discussion of theoretical and practical pedagogical questions is also very great. It may be that an outsider or cynic could discover in the society, buffoons whose mission is to make their brethren laugh; wasps, whose object is to associate a sting with every measure discussed, and owls, who have acquired a reputation for wisdom and sagacity by keeping their mouths shut, when perhaps opening them would have produced a far different reputation. But a more intimate knowledge will reveal a cheering amount of ability, charity and professional loyalty, and will confirm the statement that the Society is one of the most marked and useful features of the Chicago school system.

Now is the sound of the book-agent heard in the land. The text-book committee of the Board of Education is required by the rules of that body to make its annual report at the first meeting in the school month of April. Already the premonitory symptoms of the annual battle are felt, and experts say that soon it will be raging "all along the line." The private offices of members of the Board look like small book stores, so liberally do the various samples come. Copies of other than school books are judiciously distributed by enterprising agents "where they will do the most good." Principals and teachers, especially if they have any Board acquaintances, become as important and seem objects of as much solicitude as the independent voter in election times. And thus the fight goes bravely on. Let us hope that those who deserve it most may win the victory; that those who lose the battle may not also "lose their temper"; and that victors and vanquished, as well as the umpires, the school inspectors, may emerge from the the conflict with no stain upon their escutcheons.

The time of the last meeting of the Principals' Association was chiefly occupied in considering the work to be contributed by Chicago for the Centennial Exhibition. The superintendent requested principals to make returns as soon as convenient, of what their teachers will do in the matter of subscribing to the Centennial Fund. The proportion of the \$10,000 raised by Illinois teachers, which falls to Chicago, was stated to be \$1,000, which amounts to about one-fifth of one per cent. of the annual salary.

It was resolved to revive the Teachers' Aid Society, a charitable organization which has not been kept up since the great fire. The recent death of several teachers in very straitened circumstances, made the necessity of such a society apparent to all. Teachers will be solicited to contribute one-twentieth of one per cent. of their annual salary, this sum to be invested and the income used as may be required.

The death of Miss LAURA E. PINTA, of the Lincoln street primary school, was announced. Miss PINTA was a young lady of great promise, a graduate of the City Normal School, and a good teacher.

GEO. C. BANNAN, of Kenosha, Wis., has been elected to succeed Mr. LEWIS. Mr. BANNAN is a graduate of the Michigan State Normal School, at Ypsilanti. He comes to Chicago with a reputation for many years' successful experience in Michigan and Wisconsin.

The rumors that have prevailed to some extent for some time past, in educational and other circles, to the effect that Hon. J. L. PICKARD was to leave the schools of Chicago, have taken tangible shape, and it is announced by Mr. PICKARD

himself, in an interview with a *Tribune* reporter, that he will close his connection with the schools at the end of the present school year. In the same interview, he disavows the existence of any unpleasant reasons for his resignation, and he urges that he needs rest after his twelve years of service in this city. The uncomplaining and conciliatory manner in which the announcement is made, does not seem to savor of Mark Tapley's jollity, and leads a great many to hope that the resolution to resign may be reconsidered. Among those who are acquainted with Mr. PICKARD's work, and who know the character of his influence, there are not two opinions on the question of his resignation. In so far as it is a result of failing health and overwork, it is a public calamity. And should it be brought about by the want of confidence of the "powers that be," that bringing about is an act of base ingratitude, and a suicidal blunder of the first magnitude.

EDUCATIONAL INTELLIGENCE.

REPORT OF ATTENDANCE FOR JANUARY 1876.

	No. Pupils Enrolled.	No. of Days of School.	Av. Number Belonging.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	SUPERINTENDENTS.
Chicago.....	41 263	20	28 720	36 778	94-9	480	.....	J. L. Pickard.
Peoria.....	3 167	20	2 940	2 746	93-3	713	1 115	.....
Bloomington.....	2 999	20	2 553	2 395.8	93-8	962	.....	Sarah E. Raymond.
Hannibal, Mo.....	1 864	20	1 456	1 362	93-5	265	583	*G. W. Mason.
Rock Island.....	1 514	20	1 399	1 313	94	105	498	J. F. Everett.
Denver, Col.....	1 493	20	1 340	1 247	93	457	.....	Aaron Gove.
Freeport.....	1 444	20	1 204	1 133	94-1	415	.....	C. C. Snyder.
Lincoln.....	942	20	755	716	95	446	266	L. Kingsbury.
Marshalltown, Iowa.....	788	20	717	685	95-5	119	327	C. P. Rogers.
West Champaign.....	593	21	544	513	95-7	54	132	W. H. Lanning.
Morris.....	718	20	609	561	92	372	211	M. Waters.
Amboy.....	761	19	635	589	92-8	332	177	L. T. Regan.
Macomb.....	752	19	711	685	96-3	41	431	J. G. Shedd.
McLeysville.....	665	20	611	570	93	69	241	T. F. Dove.
Clinton.....	600	25	475	457	96	26	486	I. Wilkinson.
W. Aurora.....	576	..	508	486	94-5	96	245	L. M. Hastings.
Spring, 2d Ward.....	544	20	465	427	91-8	183	200	A. Bayliss.
Postiac.....	543	20	521	460	88	475	150	C. H. Rew.
Lacon.....	454	20	431	371	86	120	89	D. H. Pingrey.
Rochelle.....	454	20	434	413	95-1	29	260	P. R. Walker.
Petersburg.....	431	..	373	335	90	.....	.....	M. C. Connelly.
Warren.....	374	..	..	334	89	29	164	D. E. Garver.
S. Belvidere.....	361	20	330	308	93-3	34	118	J. W. Gibson.
Chenao.....	318	21	294	290	94	229	86	Daniel J. Poor.
Belvidere.....	235	21	277	258	93	34	146	H. J. Sherrill.
Marion.....	242	21	224	209	94	82	104	Wm. E. Lehr.
Easton.....	223	22	210	186	88	223	67	I. N. Wade.
Heyworth.....	210	22	199	..	94-5	43	169	S. B. Wadsworth.
Walcut.....	185	..	..	111	93-2	257	24	G. P. Peddicord.
*Paris.....	830	20	..	699	84-2	302	231	A. Harvey.
Alton.....	200	20	192	183	95	46	81	J. H. Stickney.

NOTICE.—These reports must reach us before the 16th of the month to insure publication.
*Principal High School. †New Rules.

Adams County.—Died, at Clayton, Illinois, February 6th, of hemorrhage of the lungs, Geo. L. BOOTH, for many years a teacher in the public schools of Adams county. He was a native of the Western Reserve, and about 38 years of age. He was principal of the Clayton schools last year. He had accepted the first assistant's

place and completed the second month of this term, when October 21st. he was compelled to leave the desk. He was an excellent teacher, as shown by his long service in the same district. He was modest even to diffidence, reticent, almost to a fault; and ever prompt in the discharge of duty. Not a member of any religious order, he was buried with Masonic rites in the presence of a large concourse, including parents, pupils and associate teachers. J. H.

Pulaski County.—The Teachers' Institute of Pulaski county, second session, met at Mound City, on January the 28th, for a two days' session; but in consequence of the heavy rain fall of the 27th and 28th, there was not any business done till the 29th. On that day we had an attendance of about twenty, and did a good work; if the weather had been fair, our attendance would have been much larger.

The Institute adjourned to meet at Mound City on the 14th of August next, to hold a two weeks' session. In my last report your printer made Collin read Colvin, and Strowger read Stranger. SECRETARY.

Peoria County.—Last Saturday we held the eleventh of our weekly meetings in the county. To attend them regularly is a tax, but they seem to serve a good purpose in interesting the people. On some of the darkest nights, and with the muddiest or roughest roads of the winter, people have come from three to six miles to attend the lecture of Friday evening, while they are present on Saturday from places ten and twelve miles away, coming on foot sometimes at that. W.

Woodford County.—A County Institute, commencing December 29th, and continuing three days, was held in the public-school building in Metamora, having an attendance of about fifty teachers, which I regard as a very fair number, considering the roads and time in the year. Much interest was exhibited by the teachers, and I think much good was done. The exercises were confined mostly to a consideration of the common branches, and to theory and practice of teaching. The teachers express themselves as greatly pleased with the work.

Resolved. That we extend our thanks to those who have aided us in our work.

Resolved. That we recognize in our County Superintendent, Prof. LAMB, a valuable and thorough leader, and extend our willingness to co-operate with him in any move for the improvement of our schools.

Resolved. That we fully appreciate, and tender thanks to Prof. ESPY SMITH of Minonk, for his valuable services, to J. H. MORSE and others, for their energy in making the Institute a success, to Mrs. NEWKIRK, for her very instructive paper on "School Government," and to Rev. Mr. KEELING, for his highly interesting and profitable address.

Resolved. That a copy of these resolutions be sent to each of the county papers, and also to the ILLINOIS SCHOOLMASTER, for publication.

W. A. EVANS,	} Committee.
J. NORTHOPE,	
J. H. MORSE,	
ALICE BRIGGS,	
GRETTA JAMES,	

Bureau County.—Our second Institute for the year was held at Arlington, Jan. 14, afternoon, and Jan. 15, all day. The published programme simply gave subjects to be discussed and speakers expected, the committee thus being able to adapt the programme to the circumstances. There were no disappointments; a very large number of teachers was present. The next Institute will be held at Neponset.

The *Adams County News* has the following:

We have a good public school. It is under the supervision of Prof. HOBBS assisted by Mrs. ANDERSON, Mrs. NANCE and G. L. BOOTH. The school is in a flourishing condition, and through the efficient services of Prof. HOBBS, we think we can boast of as good a public school as there is in the county.

Morgan County.—The regular monthly session of the Morgan County Teachers' Association was held in the County Superintendent's rooms at the court house, January 8, 1876. The attendance was an average one, about forty of Morgan's best teachers being present. The Association was called to order at 11 o'clock, A.

M. President HENRY HIGGINS in the chair. After the usual opening exercises, a fine recitation was given by Miss LULU WILLIAMS, of the poem, "Hallowed Ground."

Prof. HIGGINS then gave instructions in the proper use of the dictionary in schools, when the Association adjourned till 1 o'clock P. M.

The first exercise in the afternoon was a discussion: *Resolved*, That corporal punishment in our schools should be abolished by law; opened by Mr. DAVIDSON, and closed by Mr. HARNEY. Other members of the Association took part in the debate.

One of the most interesting features of the session is the Query Box; and the most interesting of the questions, and that which elicited the most comment, was, "What should be done to make our sessions more interesting?" From the many laudatory remarks of the very interesting sessions we always have, the inference was that the sessions were sufficiently interesting to draw out all teachers who take an interest in general education. The Association has gained such a character that even members of School Boards, when making inquiries for a good, live teacher, ask: "Does he attend the Teachers' Associations?"

The programme for the next session—February 5, 1876—is as follows: Opening Exercises; Music by Prof. HIGGINS; Select Readings, the Misses CASSELL and BROWN; Declamation, Mr. RICHARDSON; Fractions, Mr. HARNEY; Essay, Mr. SHINN; Orthography, Miss HURST; Recess. Music; Miscellaneous Business; Discussion, *Resolved*, That there should be a division of the public school fund for sectarian purposes, Affirmative, Mr. LONG, Negative, Mr. SHOTWELL; Grammar, Mr. DAVIDSON; Address to the Association, Prof. HENRY HIGGINS; Alligation, Alternate, J. S. HAKE; Query Box; Critic's Report.

COMMITTEE.

MACOMB, ILL., Jan. 14, 1876.

McDonough County.—The McDonough Co. Teachers' Institute met at Macomb on the 28th of December, at 11 A. M. C. HAMILTON was chosen President; D. BRANCH, Vice-President; B. ROBINSON, Secretary, and J. B. RUSSELL, Treasurer. J. M. DUNSWORTH, JR., D. BRANCH, Miss HUME, F. M. MARTIN, and J. T. KIRKPATRICK, were appointed a Committee on Programme for next meeting. The number in attendance, on account of bad roads, was not large. The Institute passed the following resolutions, viz:

Resolved, That we will, to the extent of our ability, oppose the heretical doctrine attempted to be foisted upon our people of distributing the public school fund among the different religious denominations for sectarian, or any other purpose whatever.

2. Resolved, That we hereby reiterate the sentiment before expressed, that every child in the nation should be permitted to obtain a good common-school education; but we go further, that for the safety and perpetuity of our republican institutions, every child should be compelled to attend school until he or she secures a good knowledge of reading, writing, arithmetic, spelling, geography, grammar, and U. S. history.

3. Resolved, That as an ignorant voter is a dangerous element in a free government, we, the teachers of McDonough county, Ill., in Institute assembled, are in favor of our organic law making a practical knowledge of reading, writing, and arithmetic, prerequisite to the right of suffrage, and that we petition the Legislature to take the necessary steps to bring about such amendment to our constitution.

4. Resolved, That the course sometimes adopted among teachers, of bargaining with book agents and publishers for a price to change old books for new ones, is sordid, mean, and depreciable, and demands the exertion of all lovers of honesty and professional purity.

5. Resolved, That a thorough and able system of superintendency over our schools should be maintained, and that we petition our Legislature to secure such superintendency instead of leaving this work to be controlled by the County Supervisors.

6. Resolved, That in the death of J. D. WHITTESEY, who died on the 18th inst., we lose a good man, and a veteran from the ranks of the educators of the county, and we would hereby express our sympathy with his afflicted widow and other mourning friends.

The Institute continued in session three days. Interest good throughout. Adjourned December 30, 1875, to meet at Macomb during the last full week of August next.

CALVIN HAMILTON, President.

BENNET ROBINSON, Secretary.

Champaign County.—The schools in Champaign county are doing more than usually good work this year. The excellent instruction of Messrs. BURRILL,

HEWETT and POWELL, at the Normal Institutes, has taken deep root, and is bringing forth rich harvests in the school room. Our teachers—especially those who make a practice of attending the summer drills—take hold of the work with more *system*, and with an *energy* that knows no failure. Well-arranged programmes, closely followed, is their motto, and as order in one department begets it in others, so the *government* in such schools is invariably better than it is elsewhere. The local institute work of the county has been well sustained at three points. Rantoul, Tolono and Sidney, where regular monthly meetings have been held.

Cupid, the little rascal, has been meddling to an alarming extent with the affections of a large number of our good teachers, and has succeeded in leading them into the entangling alliances of matrimony, much to the disgust of the superintendent, and the detriment of the schools. But what is sadder to relate, death has laid his icy fingers on one whom we all loved, and than whom none labored more faithfully to *lead* the young minds intrusted to her care, aright. BETTIE L. RISK was for eight years a most worthy teacher in the schools of this city, discharging her every duty conscientiously, and teaching many a golden lesson by precept and, by example. Nearly one year ago she exchanged her school-room for a sick-room a victim of over-work. To-day the bell tolls her death-knell. She has received her summons, "It is enough, come up higher." O, that every teacher were such a model of faithfulness as she!

The SCHOOLMASTER is daily growing in popularity with our teachers. We await its monthly visits with anxiety. Our share of the centennial fund is on hand, and will be sent forward in a day or two; also, a considerable amount of work from our schools.

S. L. WILSON.

The National Educational Association, at the annual meeting held at Detroit, August, 1874, adopted a plan looking to uniformity of statistical reports, which has been adopted by the Educational Department at Washington, and by State Departments generally. The Commissioner of Education requests the co-operation of City Superintendents, and all other school officials. The methods of gathering data do not seem to be of so much importance as the adoption of some uniform practice, that we may have a basis of reliable comparison.

Our committee, therefore, recommends the adoption of the form prepared by the National Association; we recommend the following amended rules for making attendance reports:

1. Twenty days shall be considered a school month.
2. The ages of all pupils shall be taken in years and months immediately upon their entering school.
3. Every pupil, upon entering the school, prepared with books and other requisites for performing his work, shall be enrolled as a member of the school, and the record of every pupil so enrolled shall be preserved, and shall enter into and form a part of the record of the school, whether he be a member for one day, for one week, or for an entire term.
4. Every pupil who shall have been in attendance during half or more than half of a given session shall be accounted present for that session; otherwise he shall be accounted absent.
5. A new enrollment shall be made each month, and all pupils attending during the month, excluding duplicate enrollments, shall be considered as belonging, and in calculating percentages no deductions whatever shall be made.
6. No record of attendance shall be kept for any half-day unless the schools have been in session for at least one-half of the half-day.
7. Any pupil that shall be absent from the school-room at a definite time previously fixed for the beginning of the session shall be marked tardy; except in case where a pupil, after having been present in the school-room shall be sent by the teacher into other parts of the school building, or upon the school premises, to attend to business connected with the school.
8. The average daily attendance shall be found by dividing the whole number of days present by the number of days of school.
9. The per cent. of attendance shall be found by dividing on hundred times the average daily attendance by the monthly enrollment.

A. HARVEY, Chairman.

BELLEVILLE, ST. CLAIR CO., ILL., Jan. 15, 1876.

SCHOOLMASTER:—The Belleville Teachers' Institute held its monthly meeting to-day, at the Franklin school, forty teachers being present. The Centennial was presented by Messrs. SLADE and RAAB, and the teachers gave liberally to the Centennial fund.

County Superintendent JAMES P. SLADE has issued a circular to the teachers of the county, to awaken their interest on behalf of the educational exhibit proposed to be made by Illinois at the Centennial.

The semi-annual examination of the public schools of this city begins January 18, and closes January 28. Promotions of pupils to higher grades occur on February 4th, and the next term opens on February 7th.

The Douglas school building at East St. Louis was burned on the night of December 20th. A new building will be erected as soon as possible. In the meantime the Ohio & Mississippi R. R. passenger depot will be used for school purposes.

The Kindergarten, established here in April last, is a success, and is conducted in a building recently erected by the Kindergarten Association at a cost of about \$5,000. Yours,
J. McQUILKIN.

ILLINOIS NORMAL.

The new term opened on the 3d of January, and is progressing very pleasantly thus far. The attendance is considerably greater than last term,—all the seats being filled, while several are obliged to occupy chairs by the windows. Eighty-five per cent. of those present last term returned. The societies have just taken possession of their halls after being refitted; and their appearance is very pleasing. The two societies gave a festival at the Baptist Church on the evening of Jan. 14th, to raise funds to assist in paying the expense attending the repairing of their halls. A general good time was had, with a net financial result of about \$160. The students made their contribution in aid of the Illinois Centennial Fund, on the second Friday of the term; they contributed about \$50.

PROF. METCALF was summoned to Massachusetts to attend the funeral of his father, the last week in December.

PROF. STETSON and wife spent vacation visiting in Michigan.

DR. EDWARDS began his pastoral work in Princeton, Jan. 2.

NELLIE EDWARDS is teaching in the Normal Department.

JASPER F. HAYS, of the class of '73, was married on the evening of Dec. 29, 1875, to Miss ROSALIA ROBINSON, of Whiteside county.

PERSONAL.

P. N. HASKELL, who, for five years past, has had charge of the Hyde Park schools, retires from the ranks to enter upon the study of the law. In his withdrawal the profession loses a superior scholar, an exceedingly efficient teacher, and a gentleman of spotless life. Possessed of an unusual amount of pertinacity, he has given the Hyde Park schools an enviable reputation wherever known. It is with much regret that we see men of his kind seeking other professions. We wish Brother HASKELL abundant success in his new field—a work toward which he has been looking for some years. He is succeeded by LESLIE LEWIS, of Chicago, widely known as one of the most able of the many good teachers of that city.

JEPHTHAH HOBBS is at Clayton this year.

J. N. FORSTER is principal of schools at Mendon.

C. W. ROBINSON has charge of the schools at La Prairie.

The Cairo schools are in the hands of G. G. ALVORD.

J. W. GIBSON and H. J. SHERRILL are still at Belvidere.

The only graded school in Bond county is in charge of S. M. INGLIS, at Greenville.

C. P. SNOW continues at Princeton. His health is much improved.

J. H. FREEMAN is at Unity, Me. "Richard 's himself again."

J. A. MERCER is at Sheffield.

GEO. P. PEDDICORD is managing the schools at Walnut.

J. N. WILKINSON is doing his second year's work at Buda.

GEO. C. MARTIN is principal at Shannon, and JOHN R. GROSSMAN at Milledgeville.

A graded school has been organized at Hardin, Calhoun Co., and put in charge of JAMES B. DAY.

D. C. ROBERTS continues at Beardstown, and CHARLES DEGARMO at Naples.

G. P. ORR is at Ludlow, O. C. PALMER at Tolono, W. H. LANNING at Champaign, and I. N. WADE at Rantoul.

H. E. ANDREWS is at Pana, W. C. GRIFFITH at Taylorville, and D. M. GIBBS at Rosemond.

L. S. KILBORN still holds the principalship of the Marshall schools.

P. B. BENLEY is at Clay City, and A. A. SANGER at Xenia.

M. MOORE is still at Charleston.

W. WHITESIDES is principal at Sycamore, S. G. HALEY at DeKalb, and A. E. BOURNE at Sandwich.

The graded schools of Dewitt county are supervised by I. WILKINSON at Clinton, and W. D. HALL at Farmer City.

W. T. BROMFIELD is at Tuscola.

MISS LIZZIE LEEPER, for twelve years a teacher in the public schools of Decatur, has resigned the schoolroom for the household. The Board of Education passed very complimentary resolutions.

ITEMS.

The Boston School Committee has been reduced from one hundred and twenty-four to twenty-four. *Knock off another dozen.*

Minnesota has adopted an amendment to her constitution permitting women to vote on school questions, and to be elected school officers.

Massachusetts asked for more room in the educational department at the Centennial than was allotted to the United States. She ought to have a Centennial of her own.

THE AMERICAN NATURALIST begins Vol. X in an elegant new dress. It is now published by the HOUGHTONS, Boston and New York.

Bloomington takes thirty "St. Nicks" for its primary schools.

The Peabody Education Fund distributed \$97,650 last year. Ten States shared, Virginia leading with \$23,750, and Tennessee following with \$22,850. Poor Florida got \$600.

"Yours truly, OLIVER DITSON" & Co., have bought the stock of LEE & WALKER, Philadelphia, and have established a branch house there.

The teachers of Colorado, met at Denver during the holidays, and organized a State Teachers' Association. They adopted the preamble and constitution of the Illinois Association, Mr. GOVE being chairman of the committee. They also voted to urge upon the attention of the educational committee of the constitutional convention, section 3, of the Illinois constitution, relating to division of fund for sectarian purposes. As might be supposed, Brother GOVE presented this matter also.

We learn that J. H. FREEMAN has so far recovered his health that he proposes to re-enter his profession. Illinois should have him at the head of one of her schools again. We can put parties desiring a first-class principal into communication with him.

The Decatur schools have just held an exhibition netting over \$330 for the Centennial fund. Next,

BOOK TABLE.

Teachers' Manual of Instruction in Reading, designed to accompany Sheldon's Readers;

by E. A. SHELDON. New York: SCRIBNER, ARMSTRONG, AND CO.

This is a very neat book of 159 pp., and, although designed especially to aid teachers who use the author's series of readers, it contains much matter that will be of value to the teachers who use any series. The points on which it will be helpful, are the discussion of the different methods of teaching reading, including the phonic, the word, and the sentence, methods, and the directions respecting the elementary sounds in English, and how to make them correctly. The latter topic is illustrated by several diagrams, showing the structure and action of the organs of speech.

Hunter's Helps to History, and Object Lessons. D. ECKLEY HUNTER, Bloomington, Indiana.

The game of authors, so popular in many localities, will help to an understanding of *Helps to History*. Sixty cards are arranged in groups, and instead of the name of some distinguished author or book, each contains the date and name of some historical event, and also some suggestive expression. They may be used to decided advantage. The variety of games possible is great. Full instructions accompany each box. Price, by mail, 75 cents. Address the author.

Mr. HUNTER has also invented some little Object Lessons for beginners in arithmetic. A set consists of 1,115 little rounds sticks, each about the size of a match, but twice as long, and 123 small rubber rings. The sticks are arranged in packages of *tens*, and tens are arranged in packages of *hundreds*. These lessons illustrate so clearly points that trouble little folks, that their value will be seen at a glance. Price for a full set, with directions, \$1.00, post-paid. Twelve sets, \$9. We will send a box of cards or a set of the lessons as a premium, for three names and \$4.50.

Chapters on School Supervision; by W. H. PAYNE. Cincinnati and New York: WILSON, HINKLE & Co.

This book is a pioneer effort long desired by public-school men. Superintendents will be gratified and even surprised to find so little in the book to which objections arise. We have read it with continual pleasure. Could some of our Normal-school classes be informed upon many of the points therein contained, we should hear less just criticism of the poor management of Normal graduates when undertaking the conduct of small graded-schools. It has been the writer's privilege to talk with, and lecture to, many young men who, although possessing a diploma from a Normal school, yet, were in their own estimation as well as in that of others, quite ignorant of the subjects treated of in this book.

The kindly and sensible preface effectually protects the author from any but kind-hearted criticism. He says, "I see very clearly that some of the opinions, which are here embodied, will meet with a hearty protest in many candid minds." We differ from the author in his remarks on spelling, p. 189. "Poor spelling is not inconsistent with high scholarship." On p. 191 the teacher is urged to cause examination papers to be folded. In our practice, should this be enforced, written papers would be too few. The drudgery of teachers' work is the correcting of papers; and the exercise is in no danger of too frequent repetition. Anything that will contribute extra work should be avoided. A hundred sheets of fools-cap written on one side and not folded can be overlooked much quicker than the same number folded.

But the differences of opinion that may arise on reading this book, are the merest trifles compared to the sense that pervades every page. It shows the author to be a man who knows whereof he affirms. Such sayings as the following will bear re-reading by every principal. "In general, we estimate the value of labor by the amount of demonstration which accompanies it." "The energy which is

expended in supervision, is not always estimated at its just value." p. 14. "A graded-school of a thousand pupils and twenty teachers involves a system of great complexity, and requires the nicest adjustments in order to work with harmony and efficiency," p. 17. "It is safe to say that there is no profession in which empiricism prevails to such an extent as in teaching," p. 18. "Schools which employ forty teachers, require the entire time of a superintendent," p. 31. "The sense of justice is strong even in the case of vicious children," p. 55. "The general appearance of a school while pupils are entering or leaving a house, is a very fair indication of the managing ability of the responsible head," p. 59. "Perpetual interference in minor matters, which will usually work their own cure, is a capital fault in school management," p. 71.

The treatment of the "woman question," p. 47, is eminently sensible. The text-book question on p. 63, suits us, and we say to its discussion, Amen! Mr. Payne does not think it necessary to join the demagogues in their howl against publishers, but says, "The prosperity of American schools is due in great measure to the enterprise and liberality of American publishers. * * * The sub-heads on "dismissal of teachers," p. 74, and "granting of testimonials," p. 75, contain the only proper advice: "either refuse to grant such papers or tell the whole truth."

In the space allotted us, we cannot pretend even to mention the characteristic of this book that render it valuable. Every man in our profession should read it. The detailed instructions for conducting gradation, promotion, etc., will of course, be suggestive to most.

AARON GOVE.

The Bazar Book of the Household. New York: Harper & Brothers. Sold in Chicago, by Jansen, McClurg & Co., pp. 226, price, \$1.00.

Here are twenty-five chapters treating of the following topics: Marriage, Establishments, Servants, House-Keeping, Children, Home-Life, Company. These subjects,—and none are more important,—are generally treated justly and with good sense. Here is matter well worth the careful study of young people of both sexes, and especially of those who find themselves at the head of a household, or with such a situation in prospect. We note but little to criticise unfavorably, except the intimation that a man may possess *gender*, p. 152, and the very sweeping and senseless remarks concerning Corporal Punishment, on pp. 206—210.

When we have named the publishers, we need say no more about the mechanical execution of the book.

A First Circle in English Grammar, for Beginners. By T. R. VICKROY, St. Louis: Published by the Polytechnic Publishing Company.

A Second Circle in English Grammar, for the Fifth Year or Grade. By T. R. VICKROY, St. Louis: Published by the Polytechnic Publishing Company.

These little books present themselves to the public in a very attractive form,—attractive, not from any real beauty, but from the burden-lifting suggested by the sight of them.

Within the neat covers are to be found, only sixty pages in the "*First*," and sixty-four in the "*Second Circle*." Children are no fonder of bearing heavy burdens than are people of mature years, and the first sight of the big, heavy book often creates a dislike which is rarely overcome. Half a dozen such as these, however, might be carried in the overcoat or cloak pocket, thus leaving no fear of loss in the snow-drifts in case of an accident, and still there would be plenty of room for the *all sorts of things besides*.

This is a matter of no little importance, and it is gratifying to know that our colleges, even the best of them, are using the little text-books. Pages of classic lore are now *done up* in small parcels.

"A First Circle," the author tells us, is designed to conduct the beginner through the first stages of the technical study of language; but it requires only a glance at the table of contents to see that the road is rather a rugged one.

The arrangement is faulty in the extreme. The first chapter opens with an admirable lesson on objects and words, then follows a great deal of syntax, several chapters devoted to punctuation and capitals, and a little seasoning of etymology. A fair knowledge of words and their uses, should always be acquired before the

study of syntax is begun, and, though there is much that is good in the book, it is very evident that it is not good for beginners.

"A Second Circle," is an excellent treatise on etymology, and should really take the place of the *First*. The chapter on number is one of the best ever written. It is pleasant to be certain that one knows all there is to know about a thing; and therefore the student will be pleased to learn that just sixteen nouns ending in the sound of *f*, change to *v*, and suffix *es*; for the plural; that eight have double plurals; that twenty do not take *s* in the plural; that twelve do not drop *s* in the singular; and that nine have irregular plurals.

The chapter on gender is good, also. The author has taken great pains to make his sentences illustrative by putting into them words, not in general use, but of much import, nevertheless. Pupils who study this chapter will be amazed to learn that a *dauphin* is not a fish, and that *gaffer* and *gammer* are not inhabitants of fairy land.

It is, however, much to be regretted that there are many abstruse terms used, which tend to confuse, rather than to enlighten. Simplicity in the use of words, as well as in construction, always gives strength, and renders a subject easy of comprehension. The following are absolutely objectionable:—Entity; cognition; cognizes; energy; (as here used) externalizes; and others. The mind of a child has been compared, and not inaptly, to a sponge. It will absorb a *certain amount* of a *certain kind*, and *no more*, and *nothing else*.

As the books do not treat of comparative philology, the introduction of German words is defensible, only on the ground that many German children attend the public schools in the cities, and they, of course, will be benefited.

The author should rearrange his work, and give to the public more of what ought to be called *arcs*, until the circle is complete.

History of the World. By J. D. QUACKENBOS. New York: D. APPLETON & Co.

This is a volume of 474 pp. It is firmly bound, and in general is well constructed mechanically. The engravings are numerous, good, and instructive.

The text is so arranged that contemporaneous periods in the history of different nations are successively presented. Attention is not confined to a single nation until it has completed its career, and then to another occupying the same interval of time, until it has accomplished its destiny. An effort is made to have the pupil catch a glance of the whole, and see the mutual action and reaction where the parts come in contact.

The date groups, found at the close of many chapters, are exceedingly helpful. They give contemporaneous events in such form that they may be seen at a single glance. See pp. 86, 97, 127, etc. There are also numerous tables of kings, emperors, etc., and many excellent maps.

The text is lively, abounding in anecdote. The book, indeed, is exceedingly readable, and since the most important purpose that the school course subserves is to lead the pupil to future reading, this must count heavily in its favor. One feature of the text needs especial commendation. This author dwells with more fullness than most authors upon the peculiar customs of ancient people,—their houses, apparel, manner of life, etc.

The book has defects, probably. Strange would be the book that has them not. The crucial test—the use in the class-room—may determine them. Our less careful examination develops no serious faults, and we are free to say that the book pleases us.

The western agent is C. E. LANE, 117 and 119 State St., Chicago.

Graded Lessons in English. By ALONZO REED and BRAINERD KELLOGG. New York: CLARK & MAYNARD.

This book is in the direction in which grammars have tended of late—it proposes to teach pupils how "to speak and write the English language correctly" by having them speak and write it under the eye of the teacher.

It is small, containing but 143 pp., but it has more helpful work than many a "grammar" of four times its size.

We note the following points in its favor:

1. It contains an immense amount of practical work.

2. The lessons are simple and progressive, and begin where the pupil finds the language—with the sentence.
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J. R. TANKERSLEY.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

APRIL, 1876.

NUMBER 95.

PSYCHOLOGY.—IV.

First Division of the Synopsis.—Let us now consider the first division of the Intellectual Powers, that is the Presentative Power. A very common name for this power is Sense-perception, or Perception. It is the power which the mind has of knowing, or taking cognizance of, the material world about us. Material bodies have certain qualities, such as size, form, weight, color, and the mind possesses the power of knowing or perceiving them. And this is the Presentative Power.

Use of the word Perception.—This word is used by different writers to designate three different things: First, the power of the mind by which it takes knowledge of material objects; Second, the act of taking such knowledge at any one time; Third, the knowledge thus had. For examples, I may say, "The faculty of perception is the same as the Presentative Power;" "My perception of the fragrance of the rose was several times repeated;" "I acquired a clear perception of the color of the lily." Sir William Hamilton helps us by calling this last a "percept." He would say that the *perceptive faculty*, in the act of perception, acquires a *percept*.

The Presentative Power earliest exercised.—The first kind of knowledge acquired by children is a knowledge of material objects. They learn, first of all, to use their senses,—that is, they learn to look and listen, and feel with their hands, etc. It is by this exercise that the mind is first awakened into activity. This is the kind of thinking that is first done. It is not wise, therefore, to set children at work upon lessons requiring very much reasoning, or only needing to be remembered. They should be encouraged to use their eyes and ears, and the other organs of sense, and should be aided and guided in this use.

Two elements in perception.—Perception is a knowing, and there are therefore two things involved in it, namely, the mind that knows, and the thing which is known. These are sometimes called the *me* and the *not-me*,

or the *ego* and *non-ego*. The *me* is always the mind that knows; the *not-me* may be some external object entirely separated from the mind or body, or it may be the body itself or parts of it. It is impossible to have a perception without the presence of both these elements. And not only must they both be present, but the *not-me* must directly affect the *me*, in such a way as to make known to the latter some of the qualities of the former.

Perception Immediate.—The knowledge which we get in perception is of the kind called *intuitive*, that is, it comes directly. The mind is not required to learn first one thing, and then another as a consequence of this, and finally to get at the qualities or facts learned through perception. But these qualities and facts are learned directly and immediately.

Sensation precedes Perception.—In the last paragraph but one, it was stated that, in order to have a perception, the *not-me* must in some way affect the *me*. This is accomplished by means of what is called *Sensation*. The body is furnished with little white filaments called nerves, which communicate with the brain, and other nerve centers. Some of these nerves are of such character that, when touched by some external substance, they convey to the mind a sensation or feeling. Some of these sensations are painful, others are agreeable. After some experience, the mind learns that these sensations are produced by outward objects. Besides, it learns what objects they are that produce certain recognized sensations. Thus, after a time, every sensation is accompanied by a perception, or a knowledge. For an example, a dry goods dealer feels a certain sensation in his fingers on passing them over a certain piece of cloth. On examination he finds that that cloth is velvet. He then associates that sensation with velvet cloth, and the next time he feels the sensation, even in the dark, he decides at once that it comes from velvet. In this case, the feeling is a sensation, and the knowledge that velvet produces it is a perception.

Perception a simple Act.—Perception is properly a simple act, but some complex mental operations have been called by the same name. Many times we determine the qualities of external objects by a sort of reasoning process. For example, I see a piece of ice, and without touching it, conclude that it is cold. I infer that this quality of coldness belongs to the ice, because in time past I have by actual touching found that ice was cold. With closed eyes I lay my hand on a piece of cloth, and conclude that it is velvet, and possesses certain unperceived qualities, because I remember that velvet, which I have previously touched, possessed such qualities. I hear a sound from a distance, and I say it comes from a bell, not because I perceive the bell directly, but because I have known that such sounds usually come from

bells. In all these cases, however, in order that I may draw these inferences, I must learn something by actual, direct perception, I must look at the ice, and by direct perception mark its lights and shades, before I can feel sure that it is that cold body. I must put my hand on the velvet, and by direct perception feel its peculiar softness, or I cannot infer that it is of silken texture. But I do not directly perceive the coldness of the ice by the sight, nor the material of the velvet by the touch.

Sensations belong to the Soul or Me, but come through the Body.—Sensations are experiences of the mind or soul. The sensation of glossy softness is not in the velvet: the sensation of cold is not in the ice, both are in the *me*. They are affections, pleasant or otherwise, of the mind experiencing them; just as the emotions of joy or sorrow are. Material objects have no sensations as we use the word.

But the mind experiences these sensations only through bodily organs. We can only experience heat or cold, sweetness or sourness, through the nerves that are adapted to convey them to the mind. A soul unconnected with a body could not be affected in this way. Herein the sensations differ from the spiritual emotions, such as joy, sorrow, etc., which are affections of the mind independently of the body. Sensations then belong to the mind as connected with the body.

Qualities of Bodies.—Through the Presentative Power, we become acquainted with external objects. But we learn them only by their qualities. Our percepts are all derived from these qualities. Of the substance of material bodies we know nothing and can learn nothing. I know ice by its brilliancy, its exhibition of light and shade, its low temperature, its being formed of water, etc. These qualities, and such as these, are all I know of it.

How Classed.—The qualities by which we know objects may be divided into two groups. Some of them are, as we view them, essential to the very existence of material bodies. As we understand matter, we cannot conceive it as being without these qualities. For example, every material body must have some size, some form, some situation. If any one should attempt to describe some body without any one of these qualities, we should at once pronounce the description false, and the things described impossible.

But this is not the case with such qualities as color, weight, hardness, etc. Bodies might exist without these. For example, bodies in the dark have no color; bodies away from the influence of other bodies have no weight, etc.

Names of Divisions.—Qualities of the first kind have usually been called Primary Qualities, and those of the other class, Secondary Qualities.

RICHARD EDWARDS.

THE OLD SCHOOL HOUSE.

Whatever else to the night has gone—
The night that shall never know a dawn—
It stands undimmed in my memory still,
The old brown school-house on the hill.

I see the briars beside the door,
The rocks where we played at "keeping store,"
The steps we dug in the bank below,
And the "bear-track" trod in the winter snow.

The corner brick on the chimney lies
Just as it did to my boyish eyes;
And in dreams I throw the stones again
I threw at the toppling brick in vain.

The names on the weather-boards are part
Of the sacred treasure of my heart;
Some yet a place with the earth-sounds keep;
And some in the halls of silence sleep.

I hear the growl, from his central lair,
Of the swiftest boy who stood for "bear;"
And the sound brings back the joy and glow
Of the chase around the ring of snow.

Often again in thought I slide
On the stone-boat down the long hillside;
The breathless speed and the dizzy reel
And the wind in my lifted hair I feel.

Ah me! There are spots that hold my dead
In a sleep unstirred by memory's tread;
And many a scene of life's triumph lies
Deep in the mists that never rise.

The things of rapture and things of tears
Are hidden within the veil of years;
But the old brown school-house on the hill—
It stands undimmed in my memory still.

—*Michigan Teacher.*

THE GRADED SYSTEM.—II.

Recurring to the illustration of the closely graded school, with its partitions and bolted doors, I will make but a single alteration, and that should consist in keeping the doors opened. In each room is found a teacher of whom certain results are required in the pursuit of methods which are of her own adoption. Among the smaller pupils there are several classes in each room. Through these classes, and through the open doors, there is a constant stream of the brighter pupils, or those more favored by home influences, moving steadily onward. The intervals between classes, and between the highest class of one room and the lowest class of the next room, are short and easily passed. At different stages in the course of the stream, it possesses different volume, sometimes embracing within its limits whole classes, at other times narrowed to a few who move more rapidly. Some drift into the eddies, but by a little special effort on the part of the teacher, they are brought finally into the current. At seasons of flood, when unwanted pressure is felt upon the stream, the banks may be overflowed, and some are left in pools to stagnate, unless special attention be given to the cutting of channels for their release. The freer the flow of the stream the less danger of stagnation.

To drop the figure—the pupils who are capable of more rapid advancement than their class-mates, pass into the next class above, and by so doing awaken the ambition of those whom they have overtaken, so that they carry with them, into the next class, some one who might otherwise have remained sluggish till their course was completed. The places they have left are filled by the brighter element of the class below. By the transfer of the better pupils, those remaining find themselves in advance of those who have been transferred to their ranks, and they may feel the influence of that spirit, which has brought to their class the better part of the class below. A practical difficulty is suggested in the case of rooms so filled that room cannot be found for the transfer from below. This difficulty is easily solved by permitting the teacher to anticipate the work of the next grade. Her pupils thus move forward in studies though not in rooms. As soon as the way is opened, the pupils pass over the classes whose work they have anticipated, and are not at all delayed in the general course. Indeed, this apparent delay may prove a means of more rapid advancement, in that it affords the teacher a little variety in her work, and incites her to compare results with the teacher next above her. Instances are not at all rare in

which teachers of lower rooms have carried their pupils entirely beyond those of the next room above. Since this remark brings me to a consideration of our own work under a graded system, I may be pardoned for saying that in the main, our own schools are an illustration of what is sketched above. To those who wonder how we can promote by classes or by grades, at any time in the year, and without regard to promotions in grades above—it is sufficient to say that our room limits have no relation to grade limits. The pressure for room is always from below, while withdrawals from school are almost invariably from above. Thus frequent opportunity is given for transfer upward, but it is not at all essential to promotion from grade to grade that such opportunity for transfer be available. It sometimes occurs that the teacher of a room carries her pupils through two grades before an opportunity for transfer comes. Sometimes the pressure from below for vacant space above takes away the pupils of a teacher before half the work of a grade is completed. Transfers from room to room are made when vacancies occur—promotions from grade to grade in study are made when the pupils have completed the work of their grade. And right here comes the criticism: "This course must involve a frequent change of teachers." In exceptional cases it is true, but the exceptions are found in the lowest grades from which pupils are passed upward to make room for the crowd of applicants below. Even in these cases the chances are about equal, that the transfer will be from a poorer to a better teacher, and in cases where equal ability exists, the feeling on the part of the child that he is promoted is an incentive to greater effort. But in the main, change of teachers under this flexible system is no more frequent than under the system of uniform time for promotion with a single exception to be noted hereafter. The time required to pass through any grade is for the average pupil a constant quantity—six months, eight months, or ten months. The time the pupil spends with the teacher is the same, whether the grade be entered in September, or November, or March. The time of promotion has nothing whatever to do with the length of time the pupil remains under the same teacher. In the course of eight years, about the average time required to complete our Primary and Grammar Courses, ten changes of teachers are probable. The number of changes is the same whether the changes be made at the beginning, in the middle, or at any other time of the school year. In the extreme case of annual promotion, changes are made as often as promotion occurs, which is once each year and at a fixed time. No provision is made for exceptionally bright classes, or exceptionally excellent teachers, making it possible to pass a grade in less than the prescribed time. Right here the

flexible system has decided advantage, and this is the exception alluded to above. Many instances have occurred in our schools of the passing whole classes through two grades in the time allotted to the completion of one. Many individual instances may be cited of pupils who have completed three grades in the time allotted to one without injury to themselves, and with profit to the classes through which they have passed. Within the limits of a course of study requiring eight years for its completion by the average pupil, we have twenty-eight classes varying in distance from one month or two months in the very lowest grades, to three months or five months in the highest grades. Pupils failing in promotion when examined with the highest class in a grade, fall back in their course but a little time, since the class into which they drop is but a short time in the rear. With the knowledge of this fact before the examiner, he is not tempted to put forward those poorly prepared as he might in sympathy do, if the interval was a year or even six months. The good of the individual pupil may be best subserved by a little more thorough preparation. The discouragement to those who fail is far less when the hope of another trial is not long deferred. A pupil absent for a month or two on account of sickness finds a class at the point reached by his class at the time of his leaving. He is not subjected to the mortification of going back several months in his work, nor under the necessity of overtasking his strength that he may make up lost studies. The steps from class to class are so easily taken that many pupils are encouraged to try for more rapid advancement than they would think of attempting if the work of six months or a year must be anticipated. The advantages of gradation and classification are too apparent to need further discussion — and such flexibility as prevails in our system, and the system of St. Louis, which is nearly allied to ours, certainly reduces to a minimum the danger of injury to individual pupils.

There are a few cases that call for discretion in administration of even the most flexible system. Occasionally, a class of disheartened ones settles down into sheer indifference or despair. Such a class should be broken up and its members distributed to other classes. A very few pupils are found of defective intellect. To such no harm can accrue if they are passed with the class into which they fell upon entering, without the formality of examination. At least a pretended examination will suffice. Others are found of advanced years and limited opportunities, who can spend but part of a year in study. Such are admitted without registry, and no record is kept of their class standing. They recite with such classes as they prefer, and spend the whole, or part of the day in school, as they may choose. To

those, who by reason of feeble health, are unable to take the full course, permits are issued upon physicians' certificates for half-time study. These cases seem to cover all exceptions that need to be provided for, and they are very rare.—*Supt. Pickard's Report.*

Concluded from last number.

ADVICE TO BEGINNERS.—VI.

Reading, Spelling and Writing of the first grade are the subjects of this and the succeeding paper. They are so closely allied that it is difficult to treat of them separately. Language-work and printing also come in close connection, but they must be considered in a future article.

My object is not to present several theories of teaching, to compare one with another, and to discuss their respective excellences, but rather to give you a plain, practical plan of teaching beginners in these subjects,—one which is easily understood, of easy practice, and adapted to most of the text-books used in our schools.

Take the First Reader and turn to the page containing the first reading lesson. There may be two, three, or four different words upon the page. Some books will have many more. Take the first word of the page, and place it in print upon your black board. If it is the word *cat*, you can talk with the pupils about the cat at home, can show them the picture of a cat in the book, and by association in a short time they will know the word *cat* on the board and in the book.

Next, teach them the names of the letters of this word so that they can say them in any order you may point to them in the word, or as you may have them placed separately upon the board. Show them that their spelling is the giving of the names of the letters in order as placed in the word.

Take time to do this work well. When it is well done, place the word in nice script upon a line at the top of the board and let it remain there.

Show the pupils the difference between the script and print letters, and show them it is easier to make and join the former. As the two kinds of letters are so nearly alike in most instances, it does not take much longer to teach the pupils to read them both quite as readily as either one.

Continue this work word by word with constant reviews of former words until fifty words are thoroughly taught. Do not take any words outside of the text-book, nor in a different order from the arrangement there. Do not teach a letter until you have a word containing it. Some teachers,

finding charts in the school-room, think they must use them, whether or not they are intended to accompany the text-book used in the school. Such charts may be used in reviews as far as the words conform to the ones of the book, but one set of words should not be taught from the book, and another set from the chart. It is better to make a chart upon the blackboard of the words of the Reader as fast as they are taught. If there is not black board enough in the school-room, you can get printing paper and colored crayon, or green curtain paper and white crayon, at a slight expense, and make all of the charts necessary for your work. If there is not black-board surface sufficient, there is always room for the charts of your own make.

The words put down in script as fast as taught should be arranged in alphabetical columns.

When the first fifty words of the Reader are taught, they will be arranged as follows: (See chart 1 in May number.)

This chart can be used in many ways. For pronouncing exercises, have your pupils pronounce one column down, another up, or one line across, and another back. Then have miscellaneous pronouncing, frequently returning to any word not thoroughly learned. At times let each pupil hold a pointer and strive to find first the word which you pronounce. Let each pronounce for the others to find. Sometimes let each point to the words by columns, and see who can pronounce correctly the greatest number of words in a minute. You will be surprised at the rapidity of their work after a little practice. You can not take too much pains in this part of your work, and it would well pay to have another chart of the same words in print.

The eye must be taught to recognize the words instantly. In our own reading we not only must be able to pronounce words without hesitation, but in order to give good expression, our eyes must always be recognizing words in advance of the ones our lips are pronouncing. Never let your pupils spell words, nor hesitate to pronounce them, while reading. Put away the books and have your pronouncing exercises until your pupils can read the words without such hesitation.

The monotonous reading of young pupils is almost entirely owing to the practice of spelling words while reading, or not knowing them at sight. If a pupil in reading the sentence, "The man is old," does not know the word *old*, he will prolong the pronunciation of the word *is* while thinking of the word he does not know.

At the time the words are taught from the board in print, the pupils must be made to understand the meanings of them, and the chart gives an opportunity for frequent reviews of the ideas of the words.

Again, the words can be used for spelling exercises by giving certain columns to be spelled at certain times, and by constantly selecting the words that cannot be spelled quickly and correctly by all of the class. Sometimes it is well to assign certain columns for a "spelling down" exercise. Sometimes let the pupils call upon others in the class to spell what they think are the hard words. One can spell a word, and all the rest can repeat the spelling in concert. Many young pupils study the spelling book containing words they will never use, to the neglect of the spelling of words they are daily using in their reading exercises.

At first the pupils should be taught to spell the simplest words by sound, and at all times while using the Reader, the words of difficult pronunciation should be so spelled. The chart gives an opportunity for frequent review exercises of this character.

Again, you can point to different words and have the pupils read short sentences as follows:

The man saw a fat pig in the lot.

Do you see the cow eat the hay?

All of the sentences of the Reader from which these fifty words of the chart have been taken, should be pointed out, and very many other combinations should be made. In a short time each pupil will be ready to point out words forming sentences for the others in the class to read.

Again, all of the words of the Reader should be written by the pupils: and every word on the chart should be nicely written as a copy, and they can easily be found as they are in alphabetical columns.

Now, remember that all of these words are from the First Reader. No outside words should be taken, for this is the preparatory work for the use of the Reader, which is supposed to be used up to this time only for frequent reference.

When the books have been placed in the hands of pupils, and they have been taught to read from them well what they have already been taught to read from the chart, the working to a plan like the following will make of them thinkers, readers, writers, and spellers.

After the class has read, and before the pupils take their seats, tell them to look at the advance lesson and find a new word. As all of the former words of the book are on the chart, they will soon be able to find the new ones. The sentences containing one or two new words are enough for an advance lesson at first. Some teachers give the lesson as so many paragraphs, pages, or inches, without any reference to the new work there may be in it. There may not be a new word, or there may be twenty. The

new words should be printed on the board, and the class should be called upon to pronounce them, and tell their meaning. If they cannot do it, you must tell them how and what, and have them repeat after you. If the word should be *nests*, and the pupils should pronounce it *nes*, give a drill in phonics, until the five sounds are given in pronouncing. Give them some hints about the studying of the thoughts of the lesson, assign to the class a page or two of the book as you may select for a review lesson. Place the new words in script in their respective columns, and let the pupils take their seats.

E. L. WELLS.

(To be continued next month.)

A COURTEOUS MOTHER.

During the whole of one of last summer's hottest days, I had the good fortune to be seated in a railway car near a mother and four children, whose relations with each other were so beautiful that the pleasure of watching them was quite enough to make one forget the discomforts of the journey.

It was plain that they were poor: their clothes were coarse and old, and had been made by inexperienced hands. The mother's bonnet alone would have been enough to have condemned the whole party on any of the world's thoroughfares. I remembered afterward, with shame, that I myself had smiled at the first sight of its antiquated ugliness: but her face was one which it gave you a sense of rest to look upon—it was so earnest, tender, true and strong. It had little comeliness of shape or color in it—it was thin and pale; she was not young: she had worked hard: she had evidently been much ill; but I have seen few faces which gave me such pleasure. I think she was the wife of a poor clergyman: and I think that clergyman must be one of the Lord's best watchmen of souls. The children—two boys and two girls—were all under the age of twelve, and the youngest could not speak plainly. They had had a rare treat: they had been visiting the mountains and they were talking over all the wonders they had seen with a glow of enthusiastic delight which was to be envied. Only a word-for-word record would do justice to their conversation: no description could give any idea of it—so free, so pleasant, so genial, no interruptions, no contradictions: and the mother's part borne all the while with such equal interest and eagerness that no one not seeing her face would dream that she was any other than an elder sister. In the course of the day there were many occasions when it was necessary for her to deny requests, and to ask services, especially from the eldest boy; but no young girl anxious to please a lover, could

have done either with a more tender courtesy. She had her reward : for no lover could have been more tender and manly than this boy of twelve. Their lunch was simple and scanty : but it had the grace of a royal banquet. At the last the mother produced with much glee three apples and an orange, of which the children had not known. All eyes fastened on the orange. It was evidently a great rarity. I watched to see if this test would bring out selfishness. There was a little silence ; just the shade of a cloud. The mother said : "How shall I divide these ? There is one for each of you : and I shall be best off of all, for I expect big tastes from each of you."

"O, give Annie the orange. Annie loves oranges," spoke the elder boy, with a sudden air of a conqueror, and at the same time taking the smallest and worst apple himself.

"O, yes, let little Annie have the orange," echoed the second boy, who was nine years old.

"Yes, Annie may have the orange, because that is nicer than the apples, and she is a lady, and her brothers are gentlemen," said the mother, quietly. Then there was a merry contest as to who should feed the mother with the largest and most frequent mouthfuls ; and so the feast went on. Then Annie pretended to want apple, and exchanged thin golden strips of orange for bites out of the cheeks of Baldwins ; and as I sat watching her intently, she suddenly fancied she saw longing in my face, and sprang over to me, holding out a quarter of an orange, saying, "Don't you want a taste, too ?" The mother smiled, understandingly, when I said, "No, I thank you, dear, generous little girl ; I don't care about oranges."

At noon we had a tedious interval of waiting at a dreary station. We sat for two hours on a narrow platform, which the sun had scorched till it smelt of heat. The elder boy—the little lover—held the youngest child, and talked to her, while the tired mother closed her eyes and rested. Now and then he looked over at her, and then back to the baby, and at last he said confidentially to me, (for we had become fast friends by this time,) "Isn't it funny to think that I was ever so small as this baby : and papa says that then mamma was almost a little girl herself."

The two other children were toiling up and down the railroad track, picking oxeys, daisies, buttercups and sorrel. They worked like beavers, and soon the bunches were almost too big for their little hands. Then they came running to give them to their mother. "Oh, dear," thought I, "how that poor, tired woman will hate to open her eyes ! and she never can take those great bunches of common, fading flowers, in addition to all her bundles and bags." I was mistaken.

"Oh, thank you, my darlings! How kind you were! Poor, hot, tired, little flowers, how thirsty they look! If they will only try to keep alive till we get home, we will make them very happy in some water, won't we? And you shall put one bunch on papa's plate, and the other one by mine."

Sweet and happy the weary and flushed little children stood looking up into her face while she talked, their hearts thrilling with compassion for the drooping flowers and with delight in giving of their gift. Then she took great trouble to get a string and tie up the flowers, and then the train came, and we were whirling along again. Soon it grew dark and little Annie's head nodded. Then I heard the mother say to the elder boy, "Dear, are you too tired to let little Annie put her head on your shoulder and take a nap? We shall get home in much better case to see papa if we can manage to give her a little sleep." How many boys of twelve hear such words as those from tired, helpless, overburdened mothers?

Soon came the city, the final station, with its bustle and noise. I lingered to watch my happy family, hoping to see the father. "Why, papa isn't there!" exclaimed one disappointed little voice after another. "Never mind," said the mother, with a still deeper disappointment in her own tone; "perhaps he had to go to see some poor body who was sick." In the hurry of picking up the parcels and the sleepy babies, the poor daisies and buttercups were left forgotten in the corner of the rack. I wondered if the mother had not intended this. May I be forgiven for an injustice! A few minutes after I passed the little group, standing still just outside the station, and heard the mother say, "Oh, my darlings, I have forgotten your pretty bouquets. I am so sorry! I wonder if I could find them if I went back. Will you all stand still and not move from this spot if I go for them?"

"Oh, mamma, don't go, don't go. We will get you some more. Don't go," cried all the children.

"Here are your flowers, madam," said I. "I saw that you had forgotten them, and I took them as mementoes of you and your sweet children." She blushed and looked disconcerted. She was evidently unused to people, and shy with all but her children. However, she thanked me sweetly, and said:

"I was very sorry about them. The children took such trouble to get them; and I think they will revive in water. They cannot be quite dead."

"They will *never* die!" said I, with an emphasis that went from my heart to hers. Then all her shyness fled. She knew me, and we shook hands, and smiled into each other's eyes with the smile of kindred as we parted.

As I followed on, I heard the two children, who were walking behind, saying to each other, "Wouldn't that have been too bad! Mamma liked them so much, and we never could have got so many all at once again."

"Yes, we could, too, next summer," said the boy, sturdily.

They are sure of their "next summers," I think, all six of those souls—children, and mother, and father. They may never again gather so many oxeyes, daisies, and buttercups "all at once." Perhaps some of the little hands have already picked their last flowers. Nevertheless, their summers are certain. To such souls as these, all trees, either here or in God's large country, are Trees of Life, with twelve manner of fruits and leaves for healing: and it is but little change from the summers here, whose suns burn and make weary, to the summers there, of which "The Lamb is the light."

Heaven bless them all, wherever they are!

ANONYMOUS.

ORAL LESSONS IN THE NATURAL SCIENCES AS GIVEN IN DECATUR PUBLIC SCHOOLS.

The difficulties that attend us in teaching these branches are mainly two:

1. Lack of material for illustration.
2. Lack of power to make the subject under discussion one of profitable interest, with a limited supply of illustrative material.

The former of these difficulties is felt by all in a greater or less degree, and will perhaps never be entirely obviated.

Certain things, such as the bones of the human skeleton, are hard to obtain; also, in botany, it is almost impossible to pass over some connecting links in the lessons at a time of year when the required specimens cannot be obtained, or, if attainable, they are not in a fresh condition.

Lack No. 2 is one of the greatest difficulties with which a teacher meets.

But as the good housewife is she, who, with small means and a limited supply from which to choose, can at all times keep her children tidy and presentable, and her table attractive, so the good teacher is she who can overcome this inward lack and serve up a palatable mental collation from unpromising ingredients. It is a consoling thought, too, that the power to do this can be very materially increased by cultivation and experience.

The benefits resulting from the science lessons are numerous. The first one theoretically is this: It familiarizes the minds of children with facts

that they ought to know, and which many of them would acquire in no other way.

When we think of the many homes, where almost total ignorance exists in regard to physical phenomena; where the command, "Know thyself," is utterly disregarded in a physiological sense; and where there is a firm belief that some things were made for use, but many other things just happened into existence, without any use at all, and then reflect that many of our pupils come from just such homes as these; we must know that the theoretical idea will be found correct when submitted to the practical test.

Moreover, we owe it to these simple, plodding people, to open the doors of knowledge to their children, wider than they were ever opened for them.

These hard-working citizens know that they can give hardly a thought to anything, except to keep their children supplied with food and clothes, but nevertheless, they take great pride in these same children, and realizing their own lack of education, are anxious that their children shall come out of the common school very far in advance of them in general scholarship.

Farther, many a parent has some acquaintance with these studies, but most with the cares of a family resting upon them, and the wearying labor of the counting room or shop to engage their attention, take as their mental recreation the news of the day, and think they have time for nothing more.

But let Susan or John get to searching for "specimens," or inquiring "the reason why," or noting this peculiarity as compared to the one spoken of in the school-room, and the father's paper is thrown aside, a lost enthusiasm is rekindled. The mother's quick philosophy and keenness of perception are brought to bear upon this and that point, and the fifteen-minute lesson at school is like the small seed sown. The fruit brought forth in the home-circle is a thoughtfulness and intelligence on the part of the children that helps greatly in making them manly men and womanly women.

This culture, if given at all, must be begun early, as comparatively few of our children remain in school long enough even to fit themselves for the high school.

The second useful result is this: It furnishes profitable food for the mind, and consequently profitable topics for conversation.

The mind is ever busy. As of old, "the thought of the heart is only evil continually," hence, it is an object to present something to the youthful mind worthy of being grasped by it. And is it not far better for the boys and girls to study the delicate structure of the muscles in the roast upon the dinner-table, or to test the truth of the statement that the bones of the

flying birds are hollow, when prairie chicken is in the bill of fare, than to be pondering upon some disgraceful street scene, or brooding over some fancied injury from a school-mate?

Is not one happier, who can look with admiration upon a sunflower, feel an interest in observing the Shepherd's Purse, and see utility in the downy dandelion seeds, than one who only sees in one a coarse yellow flower, in the second an insignificant weed, and in the last a pretty, harmless, plaything?

The third useful result we would notice is that it quickens the power of observation in pupils, and teachers also.

The points of interest discussed in the school-room, in regard to plant or animal, or natural phenomena, are sure to lead to the discovery of other and perhaps similar points of interest by the pupil himself.

The teacher also, looking at things with regard to the interest they would possess in the school-room, sees many things which otherwise would be passed without thought or comment.

Old and well known facts to the teacher, also take a new significance.

The habit of observing nature once successfully begun, sooner or later there comes to the mind the conviction that all things were created for some end; that though "the reason why" may often be but dimly understood by us, still it is evident that the "Great Architect of the Universe" had a design in making all that is made. This realization is, I think, important to our well being here and hereafter.

Lastly, let us notice the benefit arising from the science lessons in the increased zest with which the pupils engage in the ordinary school-work. This is, perhaps, more apparent in the lower grades. Here it enables children to understand many things in their reading lessons which could not be thoroughly explained without their knowledge of things taught in the science lessons.

Moreover, a lesson has an increased interest, when the children's knowledge of the subject extends farther than the facts stated in the lesson.

MARY JOHNSON.

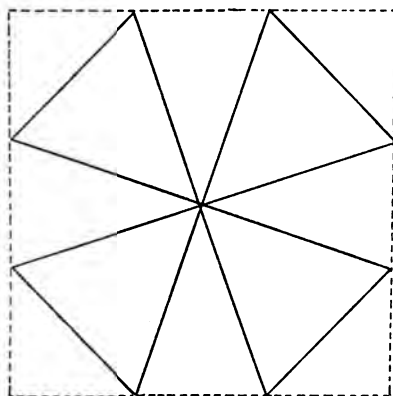
The chief duty of the teacher is the formation of good habits in his pupils. Teach the child to notice the structure of the flower under his feet, and you give a direction to his mental acts that tends to make him a reverent scholar.

DRAWING.

XLIX.

MATTER.

- 1st. Draw a two-inch square.
- 2d. Trisect each line.
- 3d. Connect the left trisecting point in the upper line, and the right trisecting point in the lower line.
- 4th. Connect the right trisecting point in the upper line, and the left trisecting point in the lower line.
- 5th. Connect trisecting points in the vertical lines that correspond relatively with those in the horizontal lines that are connected.
- 6th. Connect the left trisecting point in the upper horizontal line, and the upper trisecting point in the left vertical line.
- 7th. Connect the right trisecting point in the upper horizontal line, and the upper trisecting point in the right vertical line.
- 8th. Connect trisecting points in the lower horizontal line, and the lower trisecting points in vertical lines that correspond relatively with those in the upper part of the figure that are connected.
- 9th. Erase the lines forming the square. Figure 49.



- 10th. Teach the definition of an acute-angled triangle.

L.

MATTER.

- 1st. Draw a two-inch square.
- 2d. Bisect each line; bisect the parts.

3d. Connect the left point in the upper line, and the right point in the lower line.

4th. Connect the right point in the upper line and the left point in the lower line.

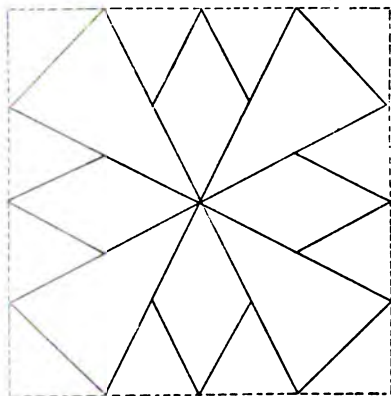
5th. Connect points in the vertical lines that correspond relatively with those in the horizontal lines that are connected.

6th. Bisect each half of each oblique line.

7th. Connect the ends of the oblique lines as in XLIX.

8th. Connect the bisecting points in the oblique lines, and the opposite bisecting points in the square.

9th. Erase the lines forming the square. Figure 50.



LI.

MATTER.

1st. Draw a two-inch square.

2d. Bisect the horizontal lines.

3d. Bisect the vertical lines ; bisect the parts.

4th. Connect the upper bisecting points in the vertical lines.

5th. Connect the lower bisecting points in the vertical lines.

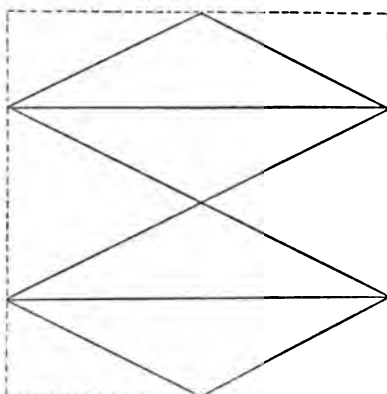
6th. Connect the upper bisecting point in the left vertical line and the lower bisecting point in the right vertical line.

7th. Connect the upper bisecting point in the right vertical line and the lower bisecting point in the left vertical line.

8th. Connect the bisecting point in the upper horizontal line and the upper bisecting points in the vertical lines, respectively.

9th. Connect the bisecting points in the lower horizontal line and the lower bisecting points in the vertical lines, respectively.

10th. Erase the lines forming the square. Figure 51.

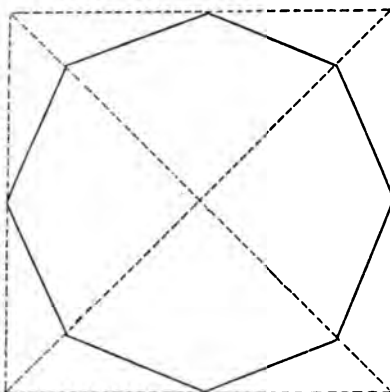


11th. Teach the definition of an obtuse-angled triangle.

LII.

MATTER.

- 1st. Draw a two-inch square.
- 2d. Bisect each line.
- 3d. Draw the diagonals of the square.
- 4th. Make a point in each half of each oblique line, one inch from the center of the figure.
- 5th. Connect the points in the oblique lines with the bisecting points in the square.
- 6th. Erase the diagonals and the lines forming the square. Figure 52

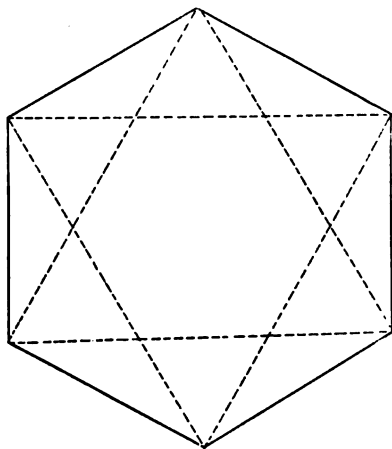


7th. Teach the definition of an octagon.

LIII.

MATTER.

- 1st. Draw a horizontal line two inches long.
- 2d. Bisect.
- 3d. One inch and three-fourths above the bisecting point make a point.
- 4th. Connect this point and the ends of the horizontal line.
- 5th. Trisect each line.
- 6th. Make a point half way between the upper trisecting points in the oblique lines.
- 7th. One inch to the right and left of this point make points and connect the two.
- 8th. Make a point one inch and three-fourths below the bisecting point in the upper horizontal line.
- 9th. Connect this point and the ends of the horizontal line.
- 10th. Connect the ends of the horizontal lines.
- 11th. Connect the upper part of the figure and the ends of the upper horizontal line.
- 12th. Connect the lower part of the figure and the ends of the lower horizontal line.
- 13th. Erase the lines within the figure.
- 14th. Teach the definition of a hexagon. Figure 53.



The teacher should require pupils to invent designs. New figures thus obtained add to the interest of the drawing exercises. They serve as evidences of the success or failure of the teaching.

E. J. TODD.

MATHEMATICAL CORNER.

"It is required to find three square numbers in Arithmetical Progression, such that, if from each its square root be taken, the remainders shall be rational squares." (See January SCHOOLMASTER.)

Solution by James Matteson, M. D., Dr. Kalb, Ill.

This problem, in general terms, is one of the many cases contained in the following triple equality:

$$\text{Given } a^2x^2 \pm dx = \square \dots (1),$$

$$b^2x^2 \pm ex = \square \dots (2),$$

$$c^2x^2 \pm fx = \square \dots (3);$$

to determine the value of x , in terms of a, b, c, d, e, f , when the double sign \pm is taken *disjunctively*.

We shall give a solution of this equality, and then exhibit a set of numbers which will fulfill the conditions in the problem proposed for solution.

Dividing (1), (2), (3), respectively, by its co-efficient of x^2 , and then putting m, n, p , for the co-efficients of x , they become $x^2 \pm mx = \square \dots (4)$, $x^2 \pm nx = \square \dots (5)$, $x^2 \pm px = \square \dots (6)$.

In order to simplify the solution somewhat, we shall take the plus signs in (4), (5), (6).

$$\text{Assume } (4) = (v-x)^2; \text{ then } x = \frac{v^2}{2v+m} \dots (7).$$

Writing this value of x in (5) and (6), and omitting square factors, we must make

$$v^2 + 2nv + mn = \square \dots (8), \text{ and } v^2 + 2pv + np = \square \dots (9).$$

$$\text{Let } (8) = (q-v)^2; \text{ then } v = \frac{q^2 - mn}{2(q+n)} \dots (10).$$

Substituting this value of v in (7), we have

$$x = \frac{(q-mn)^2}{4(q+m)(q+n)} \dots (11).$$

Putting (10) in (9), reducing, and rejecting square factors, we shall have to make

$$q^4 + 4pq^3 + 2q^2 \left\{ 2p(m+n) - mn \right\} + 4mnpq + m^2n^2 = \square \dots (12).$$

$$\text{Assume } q^2 + 2pq - mn \text{ for the root of (12); then } q = -\frac{2mn}{m+n-p}$$

If we take $q-2pq-mn$ for the root of (12) $q=\frac{p-m-n}{2}$.

With (4) $=(v+x)^2$, precisely the same values of q may be found.

Putting either of these values of q in (11) gives

$$x=\frac{\{4mn-(m+n-p)^2\}^2}{8(m-n-p)(m-n+p)(m+n-p)}\dots(13).$$

Similarly, if we take the minus signs in (4), (5), (6), we may find

$$x=\frac{\{4mn-(m+n-p)^2\}^2}{-8(m-n-p)(m-n+p)(m+n-p)}\dots(14).$$

Therefore, (13) and (14) may be written

$$x=\frac{\{4mn-(m+n-p)^2\}^2}{\pm 8(m-n-p)(m-n+p)(m+n-p)}\dots(15).$$

Restoring the values of m, n, p , and writing M for $4a^2b^2c^4d$, N for $8a^2b^2c^2$, O for b^2c^2d , P for a^2c^2e , and Q for a^2b^2f , (15) becomes

$$x=\frac{\{M-(O+P-Q)^2\}^2}{\pm N(O-P-Q)(O-P+Q)(O+P-Q)}\dots(16)$$

Putting a for d , b for e , c for f , (15) becomes

$$\frac{\{4abc^2-(bc+ac-ab)^2\}^2}{\pm 8abc(bc-ac-ab)(bc-ac+ab)(bc+ac-ab)}\dots(17).$$

Similarly, if we put (5) and (6), in succession, $=(v-x)^2$, or, which will amount to the same, interchange m, n, p , in (15), and their equivalents in (16) and (17), we may find two other sets of formulas for x , whose numeric values will be the same as those above.

An inspection of our formulas for x will make it plainly manifest that the square numerator in each will always be positive; that to render x positive, when we take the plus sign before the first factor in the denominator of these formulas, one of the terms in the trinomials therein must be *greater* than the sum of the other two; and that, consequently, to make x positive when we take the minus sign before said factor, each of said terms must be *less* than the sum of the other two.

Hence, we may assume any numbers for m, n, p , in (15), or for their equivalents in the other formulas for x ; except when such assumptions make *one* of these quantities *equal* to the sum of the other two; this would render x infinite.

For three square numbers in Arithmetical Progression, we have the well-known formulas,

$$a^2 = (2rs - r^2 + s^2)^2, \quad b^2 = (r^2 + s^2)^2, \quad c^2 = (2rs + r^2 - s^2)^2 \dots$$

Here any unequal numbers may be taken for r and s .

Let a^2x^2, b^2x^2, c^2x^2 , be the three numbers required to be in Arithmetical Progression; then we must make

$$a^2x^2 - ax = \square, \quad b^2x^2 - bx = \square, \quad \text{and} \quad c^2x^2 - cx = \square.$$

From what has been shown, it is obvious that, in this case, each of the products ab, ac, bc , must be *less* than the sum of the other two.

In order that this may be so, $r \div s$ must be $< \sqrt{\frac{1}{2} + 1}$. The least integers that have this relation, and which will make a, b, c , have the requisite ratios, are $r=4, s=3$. These numbers, substituted in the above formulas, give $a=17, b=25, c=31$.

Substituting these numbers for a, b, c , in (17), or the same numbers for a, b, c , and 17 for d , 25 for e , and 31 for f , in (16), or the reciprocals of 17, 25, 31, for m, n, p , in (15), we find

$$x = \frac{(864571)^2}{11011044931800}.$$

$$\therefore a^2x^2 = \left[\frac{(864571)^2}{647708525400} \right]^2 = \frac{558730923553289066839681}{41952633387584245160000},$$

$$b^2x^2 = \left[\frac{(864571)^2}{440441797272} \right]^2 = \frac{558730923553289066839681}{193988176784189546641984},$$

$$c^2x^2 = \left[\frac{(864571)^2}{355194997800} \right]^2 = \frac{558730923553289066839681}{126163486462241994840000}.$$

These are the least numbers that have yet been found, when the roots ax, bx, cx , are taken with the positive sign. When they are reduced to a common denominator, they become, respectively,

$$\left(\frac{12707211238697}{11011044931800} \right)^2 = \frac{161473217464867345110257809}{121243110490118466651240000},$$

$$\left(\frac{18687075351025}{11011044931800} \right)^2 = \frac{34920678517488612696550625}{121243110490118466651240000},$$

$$\left(\frac{23171973435271}{11011044931800} \right)^2 = \frac{536940352884904908826843441}{121243110490118466651240000}.$$

By varying the values of r and s , other sets of numbers may be found, *ad infinitum*. Interchanging r and s interchanges a and c , but interchanging a , b , c , does not affect the value of x , or any of the conditions in the problem.

Remarks.—This problem originally appeared in the first London edition of *John Radford Young's Algebra*; but it was omitted in the first American edition, in 1832, because it had an erroneous answer, and the editor thought no moderate, positive numbers could be found that would fulfill the conditions.

About 36 years ago, Prof. DANIEL KIRKWOOD, now of Bloomington, Ind., found the first set of positive numbers we have seen; but they are not very moderate. They have been called *huge*.

His numbers may be seen on p. 494, *Stoddard and Henkle's University Algebra*, and his solution in full, on pp. 232-3, *Illinois Teacher*, of 1864.

Dr. DAVID S. HART, of Stonington, Conn., claims to have detected the same set of numbers we have above produced, more than 20 years ago.

We know of three or four other well-read mathematicians, each of whom claims to have found *independently* the same numbers. Their solutions differ from each other; all are different from that of Dr. HART'S, which he sent us in August, 1864, and all are unlike the one we have herein given.

For two sets of these numbers, and the solutions by which they were obtained, see *Educational Times Reprint*, London, Vol. XIV, pp. 55-6, and *The Analyst*, Des Moines, Iowa, of 1874, pp. 101-5; and for another and fuller solution of (1), (2), (3), see *The Analyst* of 1875, pp. 46-9.

QUERIES.

Will the SCHOOLMASTER inform us where the authority of the teacher over the pupils going to or coming from school ceases? Where is the boundary line? W.

Ans. The law is wholly silent on this question; we think that, strictly speaking, the teacher can claim no control beyond the school premises.

However, if the matter is judiciously managed, the teacher can have practical supervision over the whole journey to and from school, and no trouble will arise.

We have mislaid a correspondent's paper asking the meaning or value of an equation constructed as follows :

$$6+4\div 2-3\times 2=\text{what?}$$

Ans. The true value of the quantity written above is 2, and not, as some may be inclined to interpret it, 4. It is a law of Mathematics, that the effect of a sign of multiplication or division never extends beyond a sign of addition or subtraction, unless the latter is included in a parenthesis or under a vinculum

UTICA, ILL., Feb. 12, 1876.

DEAR SCHOOLMASTER:—1. Is *real* time shorter in winter than in summer? (i. e.) The earth moves faster from its *aphelion* to its *perihelion*; does this make the second shorter?

2. Is the liver the largest organ in the human body? HITCHCOCK says, with the exception of the brain, it is. AGASSIZ says it is.

3. Why do trees naturally grow along streams, and not upon prairies?

4. Is constant day as long at the south as at the north pole?

Answers.—1. No. The day is measured by the time of the earth's revolution on its axis, not at all by its revolution about the sun. This axial motion is constant and uniform. Of course, the second is always 1.86400 of a day. Our querist says what is not true: the earth does not "move faster from its *aphelion* to its *perihelion*." It takes just as long to go from *perihelion* to *aphelion* as to go from *aphelion* to *perihelion*; but the earth moves more *slowly* in the neighborhood of *aphelion*.

2. WILSON, who is very good authority, says that the average weight of the brain in *men* is three pounds. He gives the weight of the liver as four pounds.

3. No better reason, perhaps, has ever been given for the absence of trees on our prairies, than the prevalence of prairie-fires: yet this seems not wholly conclusive, as the same absence is noted on the Pampas of South America and the Steppes of Russia.

4. Constant day is shorter at the south pole than at the north, because the earth is then passing that part of her orbit which includes *Perihelion*.

Some of the city papers publish very *queer* queries from correspondents, and some of their answers are queerer still. We give a specimen from one of the Chicago dailies:

1. Why are the polar circles $23\frac{1}{2}$ deg. from the poles, and what regulates the width of the torrid and temperate zones?

Answer.—1. The polar circle is arbitrarily located. The distance between the zones was regulated as nearly as possible upon the basis of temperature. The torrid zone is included between the parallels of the sun's greatest declination.

This question is well enough; but the answer is about "as clear as mud." The breadth of each of the zones is determined solely by the angle of declination which the axis of the earth makes with a perpendicular to the plane of the orbit. And here we will propound a query: On what condition would the torrid and frigid zones touch each other, thus leaving no space for a temperate zone? This is for the boys and girls.

EDITORS' DEPARTMENT.

In our last number we concluded the questions used at the last State examinations. They have attracted considerable attention and some adverse criticism.

One objects to the ambiguity of expression; another to the presence of questions that make demands upon the memory alone. Well, it would, of course, be impossible to prepare questions that would please all, and there may be ground for criticism; but we are informed by a gentleman, who passed the examination in 1874, that the questions are considerably *more difficult* than at that time. The examiners were selected with care, evidently, for they are entirely competent so far as we have observed; and, more than that, their names are a guaranty that candidates would not receive the certificates unless they deserved them.

Now as to the results:

We are informed by the State Department that there were one hundred and five applicants, and that *eighteen* succeeded in securing the diploma, and three of these had done part of the work before. Moreover, the failures were chiefly in the ordinary branches, where persons holding the State certificate should be like Cæsar's wife.

From this statement we are not to understand that all the others failed in all the branches, but that only eighteen succeeded in doing all of the work in a satisfactory manner.

We conclude that the questions were sufficiently difficult, and we have heard no adverse criticism of any kind from those who attempted the work.

With the present number, Dr. EDWARDS resumes his articles on Psychology, and Mr. WELLS his articles on common-school work. Their prac-

tical character makes them of prime importance to all who are interested in educational work.

As spring approaches, the gentlemen begin to retire gracefully from the school-rooms of the outlying districts, and the ladies come to the front for the summer term. The lords of creation must harden their muscles at plowing and sowing, and the ladies must try to catch up the dropped work of their predecessors and continue it successfully. The very best work of the year should be done during the summer term. So many are called from the schools to the fields that the numbers are not large, and are chiefly the little people. Few town schools offer the opportunities that these schools do at this season, providing always that *teachers* are in charge.

Plants, that should interest the children, bloom in profusion about them; the air and earth abound in animal life. The children who attend should demonstrate, by their rapid advancement, the value of limited numbers to each teacher. Many of the restrictions, necessary to the crowded school-room, may be removed, with most that is artificial. Now is the opportunity for *teaching*, when there is the minimum of care in respect to discipline, etc.

But there is an unfortunate impression in the minds of too many directors that any one can teach the little people, so the manifest opportunities of the season are lost because the *save-at-the-spiggot-and-lose-at-the-bung-hole* policy prevails. If the directors took the SCHOOLMASTER—as the average director does not—we should labor to show them that the girls who have had the advantages of the winter term may not be, in all respects, equal to the instruction of even twenty children. We should suggest that twenty can be found to teach the large pupils well where five or three would succeed with the beginners; that the first two years are more important than any other two, in the district school: that “well begun is half done”: that—well, we should deluge them with the profoundest educational philosophy. But we must leave the delightful task to the County Superintendent, or any one else who has access to the official ear.

The tax gatherer is upon us. The hard-earned dollars of the American citizens are slipping into his merciless fingers. Taxes are always very much too high. While this is true of taxes in the abstract, it is especially true of the school-tax in particular. Why can't there arise a class of self-sacrificing pedagogues who will attend to this little matter of instruction gratuitously? It would do away with an unlimited amount of grumbling, and would put the Republic upon a sure foundation.

Well, taxes are high. Schools do cost a good deal of money. There is large outlay in many localities, and little to show for it. Who is to blame?

Two applicants present themselves for positions. One has ciphered through the higher arithmetic, knows the rules of syntax with tolerable accuracy, can read the questions in the geography, and has "been through" the Sixth Reader. Moreover, he lives in the neighborhood and wants the school. He has never taught, and doesn't know the a, b, c of the art of instruction. But thirty dollars a month for three months would be entirely convenient, and any one, you know, can teach the beginners. Another has put his best thought and effort into the work for half a dozen years; has attended the institutes regularly, read the educational journals and teachers' hand-books, and has the unqualified recommendations of former employers. Teaching is his business, but he is guilty of the unpardonable sin of wanting fifty, or even sixty dollars a month for his services. He could do more for the pupils in one day than the former could in a week, but which is more likely to receive the position?

We have just received a letter from a gentleman who wants a school. We know him to be a successful teacher. He has chosen the profession for a life-work. He is at home in the school room. Teaching is no experiment with him. He expects to continue in the business. He wants \$60 a month. We believe he is *cheap* in comparison with a beginner at \$20. If some district feels that it has been receiving nothing for \$25 a month, we can assure it that here is a chance to get a generous sixty dollars' worth for \$60.

Hon. E. E. WHITE has been elected President of Purdue University. The institution starts under favorable auspices. It is proposed to make of it a parallel to Cornell.

The Normal School of Natural History will hold another session this summer. For particulars apply to S. A. FORBES, Normal, or, E. A. GASTMAN, Decatur. Full particulars will appear in May SCHOOLMASTER.

Supt. ETTER held the first examination of the year for State certificates at Lincoln, during the last week in March. We hope to be able to announce the time and place of those that are to follow, in the May number. Mr. ETTER wishes to hear *at once* from any places in which such examinations are desired.

We regret to learn that Dr. GREGORY, Regent of the Industrial University, at Champaign, has resigned,—his resignation to take effect at the

end of the college year. Efforts are making to induce him to change his decision; what the result may be is yet uncertain. For the teachers of Illinois to lose from their ranks EDWARDS, PICKARD and GREGORY in one year is little less than a calamity, a calamity not so much to the teachers as to the community and to the Commonwealth. Nor can we hush the query whether, if these very eminent gentlemen had received that cordial support and assistance from those whose official duty it was to support them, this unfortunate result might not have been avoided?

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

The Chicago Principals' Association has been considering, for two or three meetings, the adaptability of the Chicago school system to the education of the masses. The discussion of this topic has been made the occasion of a serious attack upon that part of the course of instruction known as the "Oral Course," and the principle of the plan of teaching geography recommended by Supt. Pickard, two years ago, elaborated by him in the Twentieth Annual Report of the Board of Education, and somewhat modified and reduced by a committee of the Association in an outline of geographical work which was adopted for this year at the September meeting.

The oral course was designed originally to be a guide to teachers in those conversational general exercises that have a place on the programme of every well ordered school-room. The theory of the course is that these exercises for the education and cultivation of the pupil's perceptive faculties, may be made conducive to the acquisition of useful, classified and definite knowledge of prescribed topics as well as not. It has been held that it is better to direct the energies of all the teachers to special channels in each of the grades than to trust these important general exercises to the wisdom, or the indolence, or the loquacity of the various teachers. Accordingly, the Chicago course of study provides that in the primary grades reaching through four years' work there shall be conversations about common objects, the human body and its visible parts, cleanliness of person and dress, politeness, truthfulness, chaste language, the five senses, domestic animals, divisions of time, colors, industry, obedience to parents, care of property, respect for others, protection and care of public and private property, animals named in reader or seen in city parks, the cat family, cud-chewers, scratchers, swimmers, birds of prey, waders, and the weasel family (these families being illustrated by Prang's *Chromos of Natural History*). In the grammar grades, running also through four years, there are found similar familiar talks upon the hygiene of exercise, eating and sleeping, personal habits, conduct, digestion, city government, respiration and precaution against diseases.

The syllabus in geography was prepared for the purpose of lessening the burdens which the memory had been previously called upon to bear. It was hoped that better work would be done by having the course of study "prescribed by a schedule of topics, information upon which may be gathered from text books, cyclopedias, maps, and charts."

The complaint against the oral course, "including the syllabus in geography," is, in short, that it asks for too much *teaching*, and the complainants insist that the time thus spent might be more profitably spent in *memorising* the contents of some good text-book. The terms "intellectual development" and "cramming" were used by the leader of the attack, as characterizing the two plans, but singularly enough

it was by memorizing a specified number of pages in each grade, that he would secure the "development." There are a great many people who regard the assault upon this particular part of the course of instruction, and the endeavor to get a condemnation of it, thus in the middle of the year, as rather unnecessary, and who will quote what Shakspeare says about crooking "the pregnant hinges of the knee" to new divinities "where thrift may follow fawning."

The most earnest complaint made against the oral course and the syllabus in the recent discussion was that made by Mr. BAKER, of the Skinner school. Mr. BAKER opposed the oral course in that it included a large number of facts and definitions which pupils were liable to be called upon to reproduce on examination without having had an opportunity to memorize by previous consultation of a text-book. It may be remarked in explanation that up to the present year pupils have had a special and separate examination in oral, that topic counting as from one-sixth to one-tenth of the pupil's general average. During the present year this separate examination has been generally omitted, and part of the work put in the "language" exercise, and another portion put in the geography.

The Chicago course of instruction was revised in 1872. This revision was largely the work of committees of the Principals' Association. Mr. BAKER was chairman of the committee on "miscellaneous," which included the oral course. Since that revision no work has been added except what was involved by the introduction of Prang's chromos, and inasmuch as this was only a more exact classification of work already in the course, it can scarcely be called additional work. Mr. BAKER was also chairman of another committee, which prepared a programme of recitations for the grammar department of the schools. This programme called for from thirty-two to seventy-two lessons per grade in "oral," and by some unhappy inspiration those lessons were directed to come at the rate of four or five per week at the close of the work of each grade. Moreover, the same committee, in addition to providing a general average to which pupils should attain before promotion, provided also that pupils who fall below a minimum ranging from fifty to seventy upon any subject should not "pass grade." It will be seen, therefore, that so far as the complaints alluded to have any foundation in fact, that foundation is justly attributable to the inventions, machinery and influence of the chief complaining witness.

A very entertaining feature of the discussion already referred to was the speech of Inspector WELCH. The Professor spoke in a quiet, conversational tone, and was somewhat humorous, and very plausible. It is well known that the Chicago course of instruction, and, for that matter, any course of instruction at present in use, does not meet the approval of this gentleman. He complained that courses of instruction were made by theorists, who assumed that pupils were to go through the primary, grammar and high school, then the college, and after that go to Europe to complete their studies at Oxford or Heidelberg. He urged that courses of instruction should be so made that when the great mass of children leave school at or about twelve years of age, they should have a fair knowledge of the three R's, should be familiar with the topographical facts of geography, and should have considerable practical knowledge of the English language.

It will be seen that the Professor's theory of the matter is not at all unreasonable. Most of his implications and assumptions were, however, conspicuously untenable. It was assumed that memorizing "good text-books" would bring about this primary millenium. It was implied that all the parts of the Chicago course not enumerated above were inimical to the results so much to be desired. The assumption and the implication are both huge mistakes. Mr. WELCH seems to have no conception whatever of the value of drawing to these children, or of the advantage which a practical knowledge of its elements gives them as they go out so young. Neither does he comprehend, acknowledge, or appreciate the influence for culture and for discipline exerted by vocal music in the schools. Every thoughtful ob-

server of the courses operating, and the results accomplished in the schools, must see that the adoption of the Inspector's ideas as to means, signifies a return, in a degree, to the fruitless results and barbarous practices of the district school of twenty-five years ago.

But the most incomprehensible of all Mr. WELCH's assumptions is the assumption that the result which he paints as so desirable is not accomplished in Chicago. Does the Professor not know that it is no uncommon thing for children to complete the entire district-school course at the age of twelve or thirteen years? Does he not know that there are less than five per cent. of the pupils of Chicago schools of the age of twelve years that cannot do all the things he specifies as so desirable and much more in addition? At the very time he was speaking there were in an adjoining room one hundred volumes of evidence in contradiction of the assumption; for the Chicago contribution to the Centennial Exposition is such a contradiction.

Mr. WELCH announced that he always had thought, does now, and "always will think," that a separate course of instruction should be established for the primary department of our schools, based on the assumption that the vast majority of the pupils will never go beyond that department. It is to be regretted, that the Professor never has specified, does not now, and probably never will specify, in what essential particular this ideal course of his differs from the Chicago course of instruction. Moreover, a great many of his friends seriously regret that as a teacher of the public he conveys unreliable and partial impressions of the facts in reference to that course of instruction, and that his statements of its results are oftener than otherwise, monstrously distorted.

Mr. BAKER led the attack on the oral course in the recent discussion. At the proper time Mr. STOWELL, of the Newbury school, made a motion to the effect that in the judgment of the Principals' Association the work of the oral course, "including the syllabus in geography," might be very much abridged with benefit to the pupil. In view of the fact that the former gentleman is to all intents and purposes the author of the oral course, and that the latter gentleman somewhat ostentatiously protested, not much more than a year ago, against making changes in the course of instruction, except at the beginning of the school year, the amount of "new light" that they have received is very noticeable.

A very suggestive hint of the spirit, and much of the matter of Mr. BAKER's speech, may be found in a stanza of "Truthful James":

"Do I sleep? do I dream?
Do I wonder and doubt?
Are things what they seem?
Or is visions about?
Is our civilization a failure?
Or is the Caucasian played out?"

A more than obvious parallel to Mr. STOWELL's motion may also be found in the same author. It occurs in the description of a "small game" had between Truthful James, W. NYE, Esq., and one AH SIN. The parallel is to be found in that exigency of the game which Truthful thus describes:

"Then I looked up at NYE,
And he gazed upon me;
And he rose with a sigh,
And said, 'Can this be?
We are ruined by Chinese cheap labor.'"

Winnebago County.—The County Institute will be held at Rockford, Illinois, beginning April 3d, and closing the 7th.

EDUCATIONAL INTELLIGENCE.**REPORT OF ATTENDANCE FOR FEBRUARY 1876.**

	No. of Days of School.	Av. Number Enrolled.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	SUPERINTENDENTS.
Chicago.....	41	091	36	631	94-6	9	619 J. L. Pickard.
Bloomington.....	30	8	099	2	289	90	736 Sarah E. Raymond.
Peoria.....	30	8	189	2	671	92-9	947 I. 138 J. E. Pillsbury, 2d Dist.
Belleville.....	31	1	750	1	579	90	837 573 Henry Raab.
Rock Island.....	19	1	483	1	265	85-5	73 445 J. F. Everett.
Freeport.....	19½	1	454	1	103	92-4	312 Chas. C. Snyder.
+Alton.....	31	1	000	894	87-4	153	356 E. A. Haight.
Moline.....	31	939	857	96	119	337	837 L. Gregory.
+Paris.....	30	810	626.6	77-3	267	195	A. Harvey.
Marshalltown, Iowa.....	30	775	676	96-3	83	334	C. P. Rogers.
+Morris.....	30	673	561	83	329	217	M. Waters.
Shelbyville.....	25	633	515	93	65	187	T. F. Dove.
Nashville.....	31	503	405	80	238	173	Chas. T. Stratton.
+Sterling.....	20	477	429.6	92-3	124	304	A. Bayles, 2d Ward.
Rochelle.....	30	459	400	94-5	23	239	P. R. Walker.
+Lacon.....	30	443	359	88	118	83	D. H. Pingrey.
Rushville.....	22	436	396	94-5	183	144	Harvey A. Smith.
Collinsville.....	31	355	308	92-7	96	124	C. A. Singletary.
+Petersburg.....	20	410	332	80	.....	.....	M. C. Connelly.
+S. Belvidere.....	30	364	311	85-5	23	105	J. W. Gibson.
Chenoo.....	31	320	273	95	254	80	Daniel J. Poor.
Farmington.....	30	393	333	95-5	121	74	Henry Cox.
N. Belvidere.....	31	274	240	93	33	88	H. J. Sherrill.
Anna.....	30	233	187	89	196	47	A. B. Strowger.
Rantoul.....	21	228	182	86-6	200	65	I. N. Wade.
Marine.....	21	222	200	90	49	82	Wm. E. Lehr.
+Buda.....	30	212	183	89	96	75	I. N. Wilkinson.
+Altamont.....	25	184	171	93	57	81	J. H. Stickney.
+Walnut.....	20	121	104	86-5	115	23	G. P. Paddicord.
Macomb.....	20	755	694	95-4	45	389	J. G. Shedd.
Clinton.....	20	601	442	94-9	6	440	I. Wilkinson.
+Carthage.....	30	477	354	88	300	107	F. A. North.
+Wilmington.....	20	459	381	93-1	152	124	R. H. Beggs.
+Lena.....	31	389	306	83-9	23	83	C. W. Moore.
+Warren.....	20	365	318	87	28	87	D. E. Garver.
+W. Pana.....	23	241	204	84	31	.....	C. H. Andrews.
Heyworth.....	23	201	186	94	47	129	S. B. Wadsworth.

NOTICE.—These reports must reach us before the 16th of the month to insure publication.
+New Rules.

PARIS, ILL., January 10, 1876.

Edgar County.—Messrs. JACOBS & FAILING, Kansas, Illinois:—In view of the increasing interest in educational work, the consequent demand for teachers of higher qualifications and the efficiency of your last year's work, I hereby ask you to conduct another Normal Institute at Kansas, commencing about the latter part of March and continuing five or six weeks.

In accordance with the wish of the County Superintendent we have decided upon the following:

We will open a Normal Institute at Kansas, Illinois, April 3, 1876, to continue six weeks.

The work will be upon—

- I. BOTANY—Morphology and Analysis.
- II. ZOOLOGY—Suited to Common Schools.

R. S. Cusick, Co. Supt.

- III. PHYSIOLOGY—With life-sized chart and Skeleton.
- IV. NATURAL PHILOSOPHY.
- V. ENGLISH GRAMMAR, READING, COMMON SCHOOL ARITHMETIC, GEOGRAPHY and U. S. HISTORY.
- VI. SPENCERIAN PENMANSHIP—Analysis and method of teaching.
- VII. SCHOOL ECONOMY—By Lecture.

The work done in the Elements of Natural Sciences, Grammar, Arithmetic, Geography and History, will be independent of text-books. This will *lighten expense* of teachers.

A Model Class of intermediate grade, by which methods of instruction will be illustrated, will be in attendance.

The Kansas Public School Board has kindly granted use of the Public School Building, and with its furniture, supplemented by a good organ and music books, we feel confident that this Institute will be very pleasant and *profitable* to all its patrons.

Boarding in good families can be had at \$3.50 to \$4.00 per week.

Tuition in Normal Department, \$5.00, payable in advance.

Tuition in Model Class, \$1.50.

Applications for admission should be sent in immediately, that full arrangements may be made.

C. W. JACOBS.

JOHN K. FAILING.

Jackson County.—Having been solicited by many teachers and friends of popular education to hold a Normal Institute next spring and summer, and feeling impressed that we must have good teachers, in order to have good schools, I have finally agreed to hold a Normal Institute in De Soto, Illinois, commencing the third Monday in April. [April 17th], 1876, and continuing ten weeks. I shall be assisted by JOSEPH HARKER, and by others if needed.

A thorough course of instruction will be given, in all the branches that the law now requires that teachers must understand to obtain a State certificate. No teacher should be satisfied until he or she has obtained a thorough knowledge of these branches of an education.

GO FORWARD, NOT BACKWARD.

Good board can be obtained at \$3.00 per per week. Tuition, \$8.00 in advance.

Text-Books—Mathematics, Robinson, Olney; Grammar, Greene; Geography, Cornell; History, Quackenbos; Botany, Youman's, Gray; Zoology, Nicholson; Astronomy, Lockyer; Chemistry, Youman's.

L. H. REDD, Co. Supt.

Bureau County.—The Institute at Neponset held two days. Arrangements for another in another part of the county were made before adjourning; thus the work moves on.

Arrangements were made for a thorough canvassing of the county in regard to the Centennial Educational Fund. Bureau may be a little slow, but she may be counted on.

The teaching profession are glad to have Dr. EDWARDS among them here, and feel that he still has an interest in their work. Mr. EDWARDS as "Shylock," in "Merchant of Venice," entertained a full house at Buda, Feb. 25, and the public school of that place is some \$40 ahead therefrom.

Piatt County.—The interest in education is rapidly increasing here, as elsewhere. A Teachers' Institute has been organized, with Mr. E. L. DRAKE for President, and Miss ADDIE R. ROBINSON for Secretary. Being located, as we are, in the northwest part of Piatt county, we have the hearty co-operation of DeWitt, McLean, and Piatt county teachers in this good work. Instructors are appointed, and subjects assigned them for the next meeting, as follows:—New work, opened by President; Methods of governing pupils, by L. LEE SMITH, of DeWitt county; Method of teaching primary reading, by Miss M. C. HUDDLESTON, of DeWitt county; Methods of teaching longitude and time, by Mr. SHAWHAN, of Mansfield; Methods of teaching geography, by A. T. HOMER, of Piatt county. Will write you of our progress next month.

A TEACHER.

Madison County.—SCHOOLMASTER: The schools in this county are in fair condition. Our Superintendent, AD. A. SUPPGER, is quite an efficient worker, and is doing much for the schools of the county. There is a lack of interest, however, shown on the part of the people.

We are having some trouble in the county over colored children. One family have been refused seats in the public school. The matter is in court.

B. F. S.

OFFICIAL.

The Executive Centennial Committee, appointed by the STATE TEACHERS' ASSOCIATION, have the pleasure of reporting to all interested that the work intrusted to them is well advanced, and that the Schools of Illinois will be properly represented at Philadelphia.

More than half the counties of the State have already responded favorably to the appeal for the fund, and many of them have already forwarded the amount, or a part of it, to the TREASURER, Hon. S. M. CULLOM, Springfield.

The committee have secured space in the main building for the exhibit—though less than was asked, it is more than that accorded to any other State except Massachusetts, which receives only an equal amount with Illinois. The committee believe that our State will worthily fill the proud position thus assigned her. Large quantities of good material are already prepared or promised; and, upon consultation at a meeting of the committee, recently held, it was decided to extend the time for the work to be sent in. Many of the schools failed to receive the circulars of instruction in time to enable them to hold the impromptu examinations in February, hence pupils' work will still be received from schools that desire to participate in the exhibition.

The conditions of examination will remain the same as heretofore published. Let every school try. The effort will do good, even if no papers are found suitable for exhibition.

The committee further concluded to have all manuscripts and other material sent to the Illinois Industrial University, Champaign, where the furniture will be manufactured, for final arrangement, packing and shipment, instead of to Springfield, as heretofore announced. All bound manuscripts will be received at Champaign until the 25th day of March, but all unbound material must be sent in before the 20th of March.

Drawings, maps and other work done by pupils; collections of minerals, insects, birds or plants will also be received until that time. Everything should be carefully marked, the name and age of the pupil should be given, and the name of the teacher and school, as indicated in the circular issued by the Superintendent of Public Instruction. Collections will be returned to the owners after the Centennial is over, if desired.

The committee would once more urge the counties where the work is not yet begun, to take measures immediately to be represented, as well as to secure their quota of the amount of funds needed. The ease with which money has been raised by the contributions of teachers, schools, exhibitions, etc., in counties where an effort has been made, leads to the belief that the same can be easily done in every county, if the Superintendent or two or three earnest teachers will undertake it. The only course that could secure educational representation at the Centennial has been pursued. It was expected that some people who care little for the school interests of the State, and some teachers, destitute of professional pride or ambition, would find fault with the method adopted to raise the fund, but we are pleased to say that the objections made to the plan have been few and trivial, and a pronounced success, in which every citizen of the State will feel a just pride, is assured.

The committee, finally, urge prompt action. The great occasion rapidly approaches, and we need every hour to complete our preparations.

S. M. ETTER, J. M. GREGORY, DAVID A. WALLACE, J. L. PICKARD, J. A. SEWALL,

Executive Committee.

ILLINOIS NORMAL.

The winter term closed very pleasantly on Thursday, the 23d of March. This has been one of the most successful terms the University has ever known; it has been especially distinguished for quiet, thorough, persistent work. Towards the close, the roll showed many gaps, as it always does at this season of the year. Sickness of students and their friends called away a great many, and several of the ladies left to begin their work in the summer schools, or to get ready for schools that are soon to open. Yet the absence has not been unusually great. Mr. TANKERSLEY, of Bloomington, has just taken a series of excellent photographs to send to the Centennial; they comprise a general view of the building, together with nine views of the interior, including the assembly room, the society rooms, the museum, and several others.

The most exciting topic about Normal just now is the proposed nomination of Dr. EDWARDS to represent this district in Congress. The project does not meet with much favor from the politicians and wire-pullers, but the promise of success is very good at present. The Bloomington *Pantagraph* supports him very earnestly. It is generally thought that, if nominated, there will be no question about his election. All who know Dr. EDWARDS will appreciate his fitness for the proposed position. It is a little curious that he is filling the same pulpit from which LOVEJOY was called to his seat in Congress.

Col. L. H. POTTER, formerly Professor here, takes charge of the Peoria Normal School while Mr. WHITE is gone to Philadelphia.

L. B. KELLOGG, of Kansas, will give the address before the Alumni, at their meeting next summer.

LEWIS O. BRYAN goes to Van Buren, Arkansas, to take charge of a private school.

VIRGIL A. PINKLEY is succeeding finely with his school at New Boston; the school contains four departments.

BELLE BRADEN, who was a member of the school some years ago, was married recently in Kansas, where she had been teaching.

Hon. S. M. ETTER and E. L. WELLS visited us a few days ago.

JUDD M. FISKE and DAVID AYRES were present at the close of the term; they report good success in the field.

The Board of Education gave up their adjourned meeting that was to have been held on the first of March. They will not meet till the regular semi-annual meeting in June.

Prof. JOHN W. COOK, Secretary of the Alumni Association, is very desirous of ascertaining the present address of every graduate. *Let every Alumnus send his own address, and that of all others whose whereabouts he knows.* No matter if the information is duplicated; but it will be a serious loss if any are not reported.

SOUTHERN ILLINOIS NORMAL.

The students breathe easier now that examinations for the Centennial are over. Photographs of buildings, rooms, pupils and teachers, have been taken. A percentage of the papers will be bound for inspection, and forwarded to the proper committee in due time.

A soiree was held at Judge W. J. ALLEN's residence; in aid of the educational fund of this county. It was well attended, and those present were well entertained by tableaux, music, readings and recitations. Some of the tableaux were very fine. It is to be repeated by request in the lecture room of the Normal.

The museum is rapidly assuming respectable proportions under the curatorship of Dr. THOMAS. We have been favored, since our last communication to the "SCHOOLMASTER," with a lecture by the distinguished traveler and scholar, Mr.

BAYARD TAYLOR, on "Ancient Egypt." Mr. TAYLOR was honored with a large audience estimated as numbering six hundred. Some persons came from the very confines of "Egypt," Cairo, to hear him. Hon. JESSE CLEMENT, correspondent of *Inter-Ocean*, gave his lecture on "Blue Stockings," under the auspices of the Locratic Literary Society. The audience was small, owing to inclemency of the weather on the evening of his lecture. His effort has been well spoken of.

Prof. HULL, since the arrival of his *Transit*, has put his class in surveying at field work. The members are preparing a topographical map, or plat, of the University grounds for Philadelphia. The Illinois schoolmasters, while in the "Quaker City," should not fail to examine it.

A joint exhibition will be given by the two societies, at the close of this term, for the benefit of their libraries. Prof. PARKINSON has been engaged by the "Zetetics" to deliver the last lecture of their course at an early day. It is promised, as his subject will be a chemical one, that there will be no lack of gas on that occasion.

The indications are that the attendance next term will be larger than ever before.

Gov. BEVERIDGE lately paid us a visit. He addressed the students at some length.

BOOK TABLE.

The Cornell University Register and Catalogue, 1874, 1875. This is a bulky pamphlet of 196 pp. Besides the Register of Officers and Students, it contains an explanation of the courses of study, a brief history of the Institution, the questions used at the entrance examination, and at the term examination in the several subjects, etc. It appears that the Institution contained 532 students of all grades, 16 of whom were post-graduates. There are 22 Resident Professors and assistant Professors, 8 non-resident Professors, and 8 Instructors. There are 13 distinct courses of study. There is no Preparatory Department. The expense for tuition is \$20 per term or \$60 per year; but a large number of the students are admitted on scholarships.

Model Second Reader. By J. RUSSELL WEBB. Chicago: GEO. SHERWOOD & Co.

In no department of the common-school course of study, has so radical improvement been made, as in the teaching of reading.

But a few years ago, the tyro stood at the knee of the schoolma'am and muttered the meaningless a, b, c. When he had mastered the names of those mysterious characters, he must still languish among the absurd monosyllables of the spelling book for other months, and it was not unusual to find pupils of average intelligence who had spent six months in this tedious drudgery, and yet could not read understandingly the simplest sentence.

Mr. WEBB was one of the earliest reformers, and no man has done more to give an impulse to rational methods.

The *Model Second Reader* is a book of 192 pp. It is based upon the "sentence method" of instruction. The introduction of 11 pp. is as full of suggestion as an egg is of meat. We quote the following:

HOW TO STUDY THE READING LESSONS:

"The children are now prepared to study the reading lesson. In doing this, several objects are to be kept in view: among them are 1st. They are to study for the information contained in them; 2d. To gain familiarity with the language used to express the separate thoughts; 3d. With reference to telling the story in their own language; and 4th. To be able to give proper oral expression when reading it."

On p. 10 a plan is presented for calling attention to the meaning of the lessons, and the thought is persistently urged that an understanding of the text is necessary to proper expression.

The new words are put at the beginning of each lesson, where they may be used for spelling exercises and for exercises in eye culture. The teacher is thus enabled to see the relative difficulty of successive lessons, and may properly assign advance work.

The book contains about a thousand more words than are found in the First; it also contains lessons in script, and several pages of word lessons at the close.

Nine colored, and numerous other cuts are found. Twelve of the selections are in verse. The exercises are conversational, and of a character to interest the little people.

The book is, in short, a reader with a plan, and that plan based upon well established principles of mental growth.

It will be sent by mail at retail at 50 cents. Address the publishers.

First Book of Zoology. By EDWARD S. MORSE, Ph. D. New York: D. APPLETON & Co.

This charming little book begins with a study of fresh-water shells, specimens of which can be found on the shore of almost any lake or river, or in the cases of any museum. Chapter III is devoted to land snails, and Chapter IV to sea snails. Clams, mussels, oysters, the common insects, the craw-fish, lobster, crab, worms, etc., occupy about one-fourth of the book.

The chapter on the characters of vertebrates is a model of simplicity and clearness.

The last few years have witnessed a remarkable activity in the study of animal life. This little book is a valuable contribution to science, since it deals with simple, and yet interesting, forms, and is written in a style so simple that a child can readily understand it. To show the care that the author has taken to make himself perfectly understood, we quote a few expressions, "Let the pupils pick out from their collections the shells like these. (Cuts of fresh-water snail shells are shown.) "The different spiral twists or turns are called *whorls*, etc.," p. 3. "The two little horns or feelers in front are called *tentacles*," p. 9. "This notch is called the *canal*," p. 23. "The shells are held together as the covers of a book are held together by the back," p. 28. Chapter VII tells how to provide material for collecting and preserving insects. Any child of ordinary ingenuity will find himself able to prepare for his work with little or no outlay of money.

The book abounds in illustrations, showing exactly how to hold and manage the specimens. In short, the pupil is informed just how to proceed in matters where he may expect trouble on account of inexperience.

Send 65 cents to C. E. LANE, care JANSEN, McCLURG & Co., Chicago, and you will receive a specimen copy by return mail.

PERIODICALS.

Scribner's for April is a very interesting number. The article on Yale College will attract the attention of teachers generally. Of no less interest to the same persons are the three articles, "Subterranean Outlet to the Upper Lakes," "Poe, Irving, Hawthorn," and "Revolutionary Letters." Price, \$4.00. SCRIBNER & Co., New York. With SCHOOLMASTER, \$4.50, or we will send it as a premium for six subscribers at \$1.50 each.

Lippincott's for April comes to hand as fresh as ever. This sterling magazine is not so widely known in the West as some others, and we wonder why. It is full of matter that is of peculiar interest to teachers. The present number contains five articles that are of especial value, viz: "The Century—Its Fruits and its Festi-

val"; "Sketches of India"; "The College Student"; "Letters from South Africa." and "The Instruction of Deaf Mutes." Published by J. B. LIPPINCOTT & Co., Philadelphia. Price, \$4.00. We will send *Lippincott* and *THE SCHOOLMASTER* for four dollars! or we will send the magazine as a premium for five names at \$1.50 each. Every teacher can thus supply himself with this excellent periodical by a little effort among his fellow teachers.

BUSINESS ITEMS.

If you want a good ink for school use, one that will not corrode the pen, get thick, nor be injured by freezing, use MAXWELL'S Violet Ink, put up in five-gallon cans; price, \$6.25 per can. Any thing in the book and stationery line will be supplied to teachers at a reduced price. We make a specialty of filling all orders intrusted to us. If not in stock, we will procure and forward as soon as possible. If you want catalogues write us. If you are in want of a rare book that you have been trying without success to procure, try us. MAXWELL & Co., Bloomington, Ill.

Mr. HOWELL'S Lithograph of the Normal is now nearly ready for distribution; it shows a view of the building and grounds, of the school-room, of the churches in Normal, etc. It is such a picture as all old students of the Normal will be glad to own. The agent has been taking the names of subscribers rapidly, for the last few days. Some changes have been made by which the cost of publishing is considerably increased; but, to those who subscribe at once, the price will remain as before,—75 cents. Names may be sent to the *SCHOOLMASTER*, or to F. J. HOWELL, Lakeside building, Chicago.

For a limited time we will send *Lippincott's Magazine*, price \$4.00, as a premium for five subscribers at \$1.50, or, ten at \$1.25, or we will send the *SCHOOLMASTER* and *Lippincott* for \$4.00.

This magazine is the peer of any, and in matters in which teachers are interested, it stands very high. We will furnish any of the other four-dollar magazines as a premium for six names at \$1.50, or twelve at \$1.25; or, we will send the *SCHOOLMASTER* and any four-dollar monthly for \$4.50. The *Popular Science Monthly*, price \$5.00, we will give as a premium for eight subscribers at \$1.50, or sixteen at \$1.25.

The Bloomington *PANTAGRAPH* is the best family newspaper in Central Illinois. It is widely circulated in the middle counties. It contains a full resume of general and local news, and is in every respect an excellent paper. The subscription price is two dollars per year. We will send it as a premium for three subscribers to the *SCHOOLMASTER* at \$1.50, or for five at \$1.25.

Read our premium list on fourth cover page, then send for specimens if you need them, and go to work.

On our second cover page will be found the advertisement of the Ruttan Heating and Ventilating Company. Read it. By their system, schoolrooms can be supplied with pure air, and can have a uniform temperature in all parts. If you desire any information on the subject write them.

ILLINOIS TEACHER,
Volume XIII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

MAY, 1876.

NUMBER 96.

WHAT SCHOOLS?

It is almost a national maxim in this country, that education is essential to liberty—that only an educated people can maintain permanently a republican government. Our free-school system depends for its justification upon the oft repeated affirmation that education is a matter of national concern, and that property is to be taxed for the support of schools just as it is for the support of government, under the accepted idea that the one is essential to the other. Our great statesmen, from Washington down, have reiterated to the people, in their gravest state papers, the necessity of popular intelligence to a free government. Education has steadily increased in popularity, till finally political parties have come to include a declaration of loyalty to the public schools in their party platforms.

But what schools are thus important? And what education is so vital to the public good? Which are the studies that are supposed to have this magic power to transform ignorant people to good citizens, and to build up a stable constituency for the state? Here the divergence begins. All believe in education, but not a few would confine it to the old-time common-school studies, "reading, spelling and writing, arithmetic, grammar and geography." Even in the halls of legislation one may hear these studies lauded as the People's Studies, and all others condemned as unnecessary luxuries. And in his speech at Des Moines, last September, President Grant said to the "Army of the Tennessee," "Resolve that neither the State nor the Nation, nor both combined, shall support institutions of learning other than those sufficient to afford to every child growing up in the land the opportunity of a good Common-School education." He would probably except West Point from his sweeping condemnation of higher schools. Others, standing high in educational circles, have announced their belief that the state should provide for the common schools only, and leave to private

enterprise or to Christain benevolence to provide for superior education. The question needs debate.

What is the the real aim of public education? Is it the good of the man, or the good of the state which is sought? If it is to benefit the individual, then the more the education the greater the benefit. But if it be replied that only that small measure of education is designed which may enable the child to become self-sustaining and to do ordinary business, then what studies are necessary to this end? It may be useful to know how to read and write, but men do not commonly earn their living by reading and writing, and hundreds contrive to earn good livings without knowing either. And how does geography or grammar help the common laborer? The geography of his own neighborhood he sees, and it is notorious that grammar does not teach correct talking. A stronger claim might be made for arithmetic, but only for the most simple operations, which may be learned in a single term of evening schooling, by every youth of proper age. The simple truth, however, is that the worker, whether in shop or field, needs to know not books, but his work, and if common education has for its object to fit the man for his work, shops and not schools are required, or schools of industry not schools of book study.

It will be objected that all men are not to be day laborers; that some are needed to fill higher places, as capitalists and leaders in business, or in society and the state, and that the school should fit men and women for the higher places of public service. But this argument proves too much. For not only are the common-school studies inadequate to such education, but moreover, if the state is to train, at public cost, men for one branch of business, it should by parity of reasoning and in exact justice to all, train each citizen for his business of whatever character.

But let us assume, and this assumption will more nearly agree with truth, that public education is not for the sake of the man, but for the sake of society and the state, that the state in its schools seeks solely to promote its own highest good, and to provide for its own peace and safety,—that the good done to the individual is subordinate and merely incidental—then the question returns, to what special end is the education to be adapted, and by what studies, and to what extent of study, is it to be carried on?

The state needs loyal and law-abiding citizens. What studies will tend most to make such citizens? A republic needs intelligent voters. What studies will best fit men to exercise the elective franchise? Can it be claimed that geography, grammar and arithmetic have any special value

for this work? Reading, to the extent of being able to read the constitution and laws, and perhaps the political speeches and writings of statesmen and journalists, certainly seems important, and some knowledge of the history of his country, will be valuable to the voter. But beyond these, what? Is it not evident that some discussion of this matter is needed? Have not both our statesmen and our educators talked at random, dealing in "glittering generalities," and jumping to high-sounding conclusions without first measuring their premises? Intelligence is in some way important to good government, hence we must educate the people. Schools are agencies of education, therefore build common schools and teach the common branches, but nothing else. The state is bound to promote the education of the people, but only to the extent of geography, grammar and arithmetic, with reading and writing. These are substantial needs, we must suppose, of the people, and requisite to make a grammatical voter, a good geographical citizen, and a thorough-going arithmetical supporter of the republic.

But, it will be urged, the real thing required is *discipline* of mind, and these studies will give that average amount of discipline which the average citizen of the republic ought to possess. Here again the argument breaks down for want of facts to sustain it. It is not proved that the common branches give the amount or kind of discipline which intelligent citizenship demands. It is obvious to every careful observer that they do not. Nor do they give as much, or as valuable, discipline as many other studies do.

If now, as a final argument, the special champion of the common schools shall say that these schools, and their old-time studies, give such elements as all men are entitled to receive, and that these elements once mastered, every man may go on as far as he pleases, but without public aid, we again dispute the averment. Elementary geography and grammar are no more elementary than elementary botany, physiology or physics. But if elementary growth is meant—the first start and primary stage in learning—then why is the public any more bound to start a growth than to continue it? Why bound to nourish the first stage of culture and not the second or third? If the first stage helps to make a good citizen, the second stage will help more, and so on.

Now let us grant for argument's sake that common-school education may help to prepare a citizen for his ordinary public duties, such as voting. But the republic needs officers as well as voters, and any citizen may aspire to, or be called upon to fill, the public offices. Intelligent legislators, judges, governors and presidents are still more important than intelligent voters,

and to prepare such officers there must be higher schools, colleges, etc. If it be urged that Christian philanthropy and private benevolence will provide these higher institutions, it is admitted that they have done much, and will do more; but so also have they done much for primary education, and should the public school fail, they would doubtless do the utmost to supply the lack. But why ought the state to throw on to the benevolence of its citizens the burden of providing for higher education, any more than that of the common schools? The argument implies not that the state *ought not* to undertake higher education, but that it *need not*. If others would not do it, then the state must. And if it can be shown, as it can, that private enterprise is not adequate to the large and rapidly growing work of higher education, then the state ought at once to come to the rescue, and not supersede, but supplement, the work of its citizens to the full extent required by public good.

Let us to our conclusions:

1. There is no argument for public common schools which is not equally valid for public high schools and colleges. The public well-being, which is the well-being of all, depends as much on educated rulers as it does upon educated voters.

2. The intelligence needed by a free people is not merely the knowledge of three or four simple elementary studies like the common-school branches, but the general prevalence of many kinds of knowledge, such as can spring only from a great system of schools; and large numbers of educated men teaching through the press, the pulpit, the forum and the schools are filling the land with a various and instructive literature. Evidently that schooling is most important which brings the people into sympathy with, and under the enlightened power of, these grand agencies of public intelligence.

3. The schools demanded by a republic like ours are not alone the elementary or common schools of the people, but a grand system of schools embracing all the grades and classes of instruction from the lowest primary, to that of the highest and grandest university. The common schools, severed from the higher institutions, would steadily decline in character and power. A system of education for a great people must be as vast and manifold as the interests of the nation itself, and it is the shallowness of mere ignorance, or the sophistry of the demagogue, which would forbid the state to provide any education except that needed by the day-laborer, and refuse to open to its better intellects the avenues to the most liberal learning, and the largest fields of science.

JOHN M. GREGORY.

ADVICE TO BEGINNERS—VII.

On the programme you will find a time for the writing of the advance lesson, and a time for the study of the review lesson. While pupils are studying they do not say to you, "Teacher, what is this word?" This is sometimes done by nearly every member of a class for nearly every new word of a lesson, and very often for many words not new.

It is supposed that you have given them some directions about their writing, that it must be upon straight lines drawn across the slate, that when there is a capital letter in the book, they must make one in their writing, and that all commas, periods, etc., of the book must be placed in their work.

To assist them in knowing how to make the capital letters, and for your use in explanations and illustrations, place permanently upon lines on the board, chart II.

The pupil will soon learn to find any letter he wishes to make.

When the class is called to recite, each pupil should take his slate with the advance lesson written upon it as many times as the length of lesson, time, and practice will allow.

Take their slates, and in a moment you will notice several kinds of errors in their writing. If you undertake to correct them all at once, you will not be likely to correct any of them to any great extent. Hence, strive to correct one thing at a time, that is, make one thing a specialty.

You will probably notice at first that the letters are not written on lines as they should be. One sentence may be written as follows:

The cat sees the rat.

With a pointer show the pupils the letters on the line on your chart. Let them count and name the letters that fall below the line. Take some of their written words and show them upon the board the right way and wrong way. Ask them to do this work better next time. Mark their slates in some way to show the ones that have done the best. Keep at this one thing of letters upon lines, with certain ones partly below, for two weeks, or more if necessary, until this work is well done. After a short time, not more than a minute or two of each recitation need be given to this work. Some time may be given to the supervision of the pupils while at work at their desks.

After two or more weeks, you can take up another error, which they have been practicing all of the time of their former work. The letters will probably not be of proportional sizes, as in the following sentence :

A boy is in the house.

The placing of letters on lines is learned. Now show them that a, m, n, o, etc., are nearly of a height, while b, d, t, etc., are about twice as high. Keep at this work of sizes of letters for two or more weeks as may be necessary,—giving such instructions as you find the pupils need by observing their work from day to day.

When this work is done, take up the subject of slopes of letters. For all of the time the writing may have been as follows :

The girl and the boy can run

The letters are on lines, and of proportional sizes, but the slopes are wrong. Show the right way as you have them written, and keep at this point until the work is well done.

When the three things mentioned are fairly taught, the pupils will be fair writers, and often this work can be done in six weeks. All of the other principles of writing, bring to their attention one at a time as fast as they can do well the work previously given.

As I have said before, this work concerning the writing need not generally take more than a minute or two of each recitation. Then divide the time of the recitation into two equal parts. Give one to the advance lesson. The pupils know all of the words. Talk with them about the meaning of the sentences. Make the reading an individual work for each pupil. If one repeats words, get him to read one sentence without repeating a word. Then a second sentence. Then put the two together ; and so on, until he can read the whole lesson without repeating. If another reads in monotone, show him which are the "loud" words, and get him to read it as if properly talking. Drill another upon inflections, another in phonics, another in reading louder, etc., etc. Show them the right ways, and the wrong ways, and do not leave the advance lesson until it can be correctly read, and is thoroughly understood by each pupil of the class. If you have given too long a lesson for the condition of your class, give a shorter one next time.

CHART I.

a boy cat dog eats fat girl house in John large man no ox pig rat saw the white you
an black cow do eat good house is James lot Mcary one pen run small yes
had can Ellen go hay may or runs says
Henry must red sees
see

CHART II.

• a b c d e f g h i j k l m n o p q r s t u v w x y z

a b c d e f g h i j k l m n o p q r s t u v w x y z

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

When they can do their work better, give longer advance lessons. Take the other half of the recitation time for the review lesson, carefully improving the pupils in anything forgotten by them, or in anything you may have overlooked in the work of the advance lessons. Have the pupils give the meanings of the words, and tell the stories they read. Have them read portions of the lesson from points of thought as you may call for them. For instance, you can direct one of the class to read where it tells of Nellie and her doll, another where it tells of John falling into the water, another where it tells of the cat lying on the rug, etc., etc. To do this quickly, they must understand the points of thought in the lesson, and if this work is practiced, they will better prepare themselves that it may be done. The advance lesson provides for the drill-work, and the review lesson for the surface work. Both are necessary, for all of one and none of the other makes "Jack a dull boy."

This plan does not take a class through the book very fast, but when the work is once done, it is well done. Then other First Readers, or simple story books, should be read by the pupils before the Second Reader is placed in their hands, for there will be time for this, if your work as teacher is well done.

There are many other things that have come to mind while writing this article, some of them strongly urged by good educators, and some of the subjects in themselves respectively worthy of the space of an entire article.

My plan has been to give you a few directions of easy practice, and for the understanding of some of the subjects I have not here developed, I will ask you ten questions, which, if you will learn to answer them well, will be of great advantage to you in your future educational work.

1. What is the a, b, c, method of teaching beginners to read?
2. What is the word method?
3. What is the phonic method?
4. What is the sentence method?
5. Is it better to use only one of these methods, or to combine two or more of them? If to combine, how, and why?
6. Which is better to teach first to beginners, printing or writing? Why?
7. Compare the words and their number upon the first twenty pages of several different primers and first readers. Which do you like best? Why?
8. What is the object in view in teaching reading?
9. What part of a pupil's school time is spent in learning to read? Does the pupil receive the benefit he ought in the time he spends? Why?
10. Can you secure better results in a shorter time? How?

E. L. WELLS.

PSYCHOLOGY. V.

A List of the Primary Qualities—The primary qualities, according to Sir WILLIAM HAMILTON, are Extension, or the quality of occupying space ; Divisibility, or the capacity of being divided,—no body being so small that we cannot conceive it as capable of being divided; Size, or the amount of space occupied by the body ; Density, or the amount of matter in proportion to the space it occupies ; Figure, or the boundaries of the body's extension ; Absolute Incompressibility, or the impossibility of being reduced to nothing by pressure ; Mobility, or the capacity of being moved from place to place ; Situation, or the quality of occupying a particular space.

These all depend on the Ideas of Time and Space.—You will notice that these qualities depend on our ideas of space and time. What is extension but a spreading out in space ? Divisibility implies the occupancy of a part of the space considered, also, an increase in the number of things, and therefore the idea of time. Each of the others has reference to space. Now space and time are both original ideas. No material body can exist without space in which it may exist. If there were no space, there could be no material bodies. It is clear, then, that *these qualities are essential to the existence of matter as we view it*, and this is one of their characteristics.

These qualities known a priori, or before experience.—For the same reason, because the ideas of space and time are original ideas, it follows that the primary qualities, which are based on these ideas, must be known before we learn the other qualities of bodies by the senses, or, what is the same thing, before the senses are exercised at all. In other words, they are known before experience. This is the second of their characteristics.

Known as such, or in and of themselves.—If what has been said is true, it follows that the primary qualities must be known as qualities, in and of themselves. They are not learned from bodies, but are known at first as qualities, unconnected with bodies. Afterwards they are found connected with bodies, but at first they are known separately as abstract qualities, and not as concrete. This is the third of their characteristics.

Characteristics of the secondary qualities.—In these three particulars the secondary qualities are marked by characteristics precisely the opposite of the primary.

First. They are not essential to the existence of matter as we view it. We can conceive matter without weight, without color, &c.

Secondly. They are learned by the exercise of the senses. How do we learn what that quality is which is called hardness ? Do we form an

idea of it by some abstract process of thought? Or is the knowledge of hardness born with us? Neither of these. We learn what it is by actual contact with the bodies in which it inheres. We touch a hard body, and find that it resists our pressure, and we call that resistance hardness. We learn the quality through experience,—through the exercise of the senses.

Thirdly. They are not known or learned in and of themselves. We never find hardness, or weight, or color, by itself. So far as we know it does not exist by itself. At least we do not find it so. We find it in bodies only.

Further Division of the Secondary Qualities.—The qualities here classed as secondary may be further divided. To illustrate the difference between them, take the quality of hardness and compare it with that of heat. We say one body is hard, and another body is hot. Both of these ideas come to us through sensations. We touch a hard body, and a certain sensation is awakened in our hand,—we feel the sensation, and we say it is caused by the hardness of the body. We touch a hot body and feel a different sensation, and say it is caused by heat in the body. Now, in the first case, we think very little,—almost nothing,—of the sensation, and our mind dwells upon the quality of the body. But in the second case the matter is entirely reversed. The sensation is so prominent before us that we think little of the quality that causes it. Indeed, the quality seems to be transferred to ourselves in the case of the hot body. As manifested to us, such qualities as heat, color, &c., are not properly qualities of body at all. They seem to belong to ourselves.

Mechanical and Physiological Qualities.—Because the qualities of hardness, softness, brittleness, toughness, roughness, smoothness, etc., have to do with the relations of bodies to each other, they are called *mechanical* qualities. And because the qualities of heat, sourness, sweetness, fragrance, etc., seem so much to be in ourselves, and so little in the objects causing them, these qualities are called *physiological*. These are the two divisions of the secondary qualities.

Physiological Qualities Produced by Bodies.—Of course the physiological qualities are *caused* by something in the bodies that awakens in us the sensations. When you warm your hands at the fire, there is something in the fire that causes the warmth in your hand. But that something is a different thing from the heat in your hand. And yet we have but one name for the two.

List of Secondary Qualities.—Among the mechanical qualities are heaviness, lightness, hardness, softness, compressibility, incompressibility,

firmness, fluidity, resistance, (the quality of rebounding,) irrisistance, toughness, brittleness, rigidity, flexibility, and other qualities of a similar kind, arising from attraction, repulsion, and inertia.

Among the physiological qualities are color, sound, flavor, savor, heat, electricity, sneezing, shuddering, and other similar feelings.

Other Names for the Classes.—The mechanical qualities are sometimes called objective, because they belong so decidedly to the bodies we are observing, and so little to ourselves. They are qualities of the objects outside of us, or of the *not-me*, and therefore called objective.

The physiological qualities are called subjective for precisely the opposite reason, that is because they belong to the subjective being, or the *me*, more than to the objective, or the *not-me*.

THE SENSES AND THEIR ORGANS.

Qualities of Bodies Learned through the Senses.—The avenues through which a knowledge of the outward world comes to us, are called the senses. The number of them, as usually reckoned, is five. In one respect they are all alike, that is, the knowledge we get through them comes to us by an excitement of the nerves, produced by contact with some external body. The reason that the number is put at five, precisely, is that there are five different kinds of sensations, and each one is dependent upon a particular group of nerves. Light impresses itself upon the nerves of the eye, and sight is the result. But light has no power thus to affect the nerves of the fingers, or of the ear. The waves of air strike upon the nerves of the ear, and sound is produced, but these waves striking on the nerves of the eye have no such effect. The senses usually enumerated are as follows: 1. Touch, whose nerves are situated generally over the body. 2. Light, whose nerves are situated in the eye. 3. Hearing, whose nerves are situated in the ear. 4. Smell, whose nerves are situated in the nose. 5. Taste, whose nerves are situated in the palate and tongue.

Relation of the Senses to each other.—The sense of touch makes us acquainted with the mechanical qualities of objects right about us. But it is limited in its range. The objects must be in contact with us, or we can learn nothing by touch. Not only this, but the knowledge we get from it is fragmentary. In order to get an adequate notion of an entire body, we must put together, in our minds, these fragments, thus forming a whole out of the parts. To get a correct notion of the shape of a cube, by touch, you must feel of each of its corners, edges and faces, and in your mind unite them.

But the sight comes to our aid here. It gives us general notions at the very start. Our first look at an object usually gives us its general outline.

But sight again is limited, and hearing comes to its aid. In the absence of the medium called light, it cannot act, but hearing is always active except in profound sleep. For the medium in which it acts, air, must always be present where animal life is.

By smell and taste we become acquainted with another kind of qualities, namely, chemical qualities.

Possibility of other kinds of Knowledge.—Sir W. HAMILTON compares the material world to a large polyhedron, or solid figure of many sides, and the mind to a spectator looking at it. The spectator can see only the sides next to him. The others, although just as real, are out of his sight. So material objects may have many qualities that are not perceived by us, because we have no senses adapted to perceiving them. Some animals are thought to possess senses additional to those possessed by man. But man has all he needs for the real work of life.

RICHARD EDWARDS.

POETA LOQUITUR.

Last night I sat with pen in hand; the firelight rising, fading,
Seemed hovering like the fleet-winged thought, my eager grasp evading,
Like one who strives to speak, but finds no words to fit his meaning,
When o'er him in some silent hour, the powers of thought are leaning,
I found no utterance for the song that through my life was ringing,
Though all the weary, mournful earth was brighter for its singing.

I thought of old Prometheus, in chains upon the mountain
For bringing down celestial fire from its maternal fountain;
And wished that I could scale the height of Heavenly hills hereafter,
E'en though the same presumptuous theft might bring its vulture after.
I seemed to see grim Tantalus, his lips with fever glowing,
While just beyond his outstretched hand the sparkling streams were flowing.
Around him close on every side, the fairest fruits were thronging.
The while his hungry eyes were filled with human want and longing.
The Danaids and Sisyphus still plied their old vocation,
That led them on through wearying toil without a consummation.
They held their empty pitchers up beside the flowing fountain,
His ponderous stone, slipped from his grasp, rolled down the trembling mountain.

While yet I gazed the scene was changed;—I saw through all my dreaming
An earthly Hades, with the world Plutonian tortures scheming.
Full many a soul, like Tantalus, had clasped the alluring pleasure
To find it fly beyond his reach, and lose the sought-for treasure.
Full many a soul, Prometheus-like, had "grasped the lightning's pinions,"

And soared with swift-winged rapture up through thought's sublime dominions,
To feel more deeply, afterwards, how prisoned souls can languish,
And how the strong, immortal heart breaks with immortal anguish.

Among the rest, I saw myself. The muses all were scorning,
And Pegasus had taken wings and sought the gates of morning.
As sculptor stands entranced before his dream of love and duty,
And sees that dream grow tangible in marble grace and beauty,
I saw the beauty of my thought, clad in the words of sages,
It might go forth to face the world and live through all the ages.
But it must walk with measured steps, and sing its song of passion,
And breath its vows of tenderness in life's poetic fashion;
Must fit its pathos to the tone that through the sweetest singing,
From year to year, from age to age, throughout the world goes ringing.

O song unsung! O words unsaid! O laugh with sorrow broken!
The sweetest, saddest part of life is what is left unspoken.
No thought entrancing as the thought beyond our grasp that fluttered,
No song so sweet as that which dies, its melody unuttered.
Amid earth's smaller joys and griefs, we laugh or weep at pleasure,
And sing our little songs of life to life's poetic measure;
But on dim Sinai's cloudy heights, our hearts are dumb with wonder,
We find no words to sing to earth the message of the thunder.

As dies the day when in the west the sun is slowly setting,
I saw my poem fade away, with anxious, vain regretting,
Yet still, as when the sun is set, the clouds are lit benignly,
Some echo of it, faint and sweet, ran through my heart divinely.
I felt its music as we feel their pathos o'er us stealing,
When olden memories, sweet and sad, stir all the founts of feeling.

O Danaids beside the well, with pitchers never-filling,
O Tantalus, unsatisfied, your sighs my heart are thrilling,
O Life, thou poem incomplete, with rhyme and measure wanting,
With but the soul, the wondrous thought, our doubts and murmurs daunting!
Man writes the poem out of tune, Death makes its music sweeter,
God touches it with His great love, and makes the song completer.

JULIA V. PHIFER.

TOWNSHIP HIGH SCHOOLS.—II.

High schools in cities and large villages are established facts; they need no words from us. It is that our country districts may enjoy similar advantages that I plead for township high schools. All that has been said in favor of high schools in general applies to them. True, in a pecuniary point of view, our country population do not need the high school so much as do the poorer classes in town, because the average farmer is much more able to pay tuition; but the farmer's life makes equal or greater demands for varied knowledge. Chemistry, botany, zoology, philosophy, mechanics,

are all good things to have in the brain of a farmer. Sneer as we may at "book farming," and there are plenty of smatterers who deserve our ridicule, it still remains true that, other things being equal, the man who best understands the nature of his soil and seed, the physiological laws on which depends his success in the raising of stock, the mechanism and principles of his reapers and threshers, is the most successful farmer.

Could we plant in every township a genuine high school, with a corps of real, wide-awake, common-sense teachers that know how to train scholars how to think and to reduce theory to practice, who doubts its beneficial effects on the entire community? For, it is not alone the scholars who are benefited by such a school; the whole neighborhood, especially the older brothers and sisters, those young men and women whose school days are past, will feel its influence in quickening mental activity.

Then, its influence on the elementary schools of the township would be worth all it costs. The incentive it holds out to scholars in the lower grades will infuse new life into these schools. Without such a school at their own doors, comparatively few will ever go beyond the merest rudiments; hence, the majority feel little ambition in their studies. With a high school at home, and the certainty that every child who is fitted for it can enter, all will be incited to greater endeavor.

The number of scholars pursuing advanced studies would be largely increased by the establishment of such schools, and this is one of the strongest arguments in favor of establishing them. If the high school is supported by township taxation, each tax-payer will be anxious that his children shall have the benefit of it, and will make exertions to secure this end. Nor need these exertions be very great. The difficulties in the way of the larger boys and girls attending school are not so great as many imagine. In winter, the time we expect them to attend, there is not much work for them to do, and the horses stand idle in the stable; they will enjoy standing in the shed by the school-house after taking the young folks to school, just as well. And as for the young folks themselves, the greatest exertion required is to get up a little earlier in the morning, so as to have the chores, in doors and out, done before school-time, "hitch up" the team, and drive to school. The chores must be done at any rate. The question is, whether they will be done in season; and as for the "hitching up," ask any boy how great a hardship that is when a sleigh ride or a party is to follow it?

The township high school will benefit surrounding schools by affording them a good example. True, in many respects, high-school methods are not

sited to elementary schools, but there are many foundation principles of teaching which hold good in both ; teachers of district schools can scarcely help gaining valuable suggestions from a well conducted high school in their vicinity. In many cases the township high school will be in connection with the elementary school in its immediate district ; the lower departments being in some measure under the supervision of its principal, would become, in greater or less degree according to how well he performed the work of supervision, models for surrounding schools.

Another advantage of these schools would be affording a supply of home teachers with home training. A knowledge of the home surroundings of his pupils is of great value to a teacher. If he meets his scholars for the first time when he meets them in the school-room, he is at a disadvantage. He cannot know that what seems sulkiness in John is but the reflection of his father's harshness ; that Mary's persistent silence comes not from stubbornness, but from inherited shyness, and so on through the catalogue.

With a township high school, the most promising young people would fit themselves for teaching the neighboring schools, and this fitting would be done, in a measure, under the eye of their future employers. Parents and directors could watch their course as scholars, note their habits, physical, social, mental, moral, and know whether these were such as they wished children to follow. Such knowledge is invaluable. So long as it remains true, as it ever must, that what we *are* influences our scholars more than what we teach, so long must this knowledge be of really more moment than any we can gain by our examinations. The reflex influence on the teacher is quite as valuable. The consciousness that he is thus scrutinized will be a wonderful incentive toward good, and a restraint from evil.

Teachers will spend more time in preparation when that preparation can be made, in a large measure, at home. To the farmer, never accustomed to count the cost of what he eats, board-bills seem enormous, and are really the great barriers of his children's gaining an education, when they must go away from home for it. He pays for books and tuition cheerfully, but board-bills do run up so fast, no wonder he thinks a few terms must suffice ; so his children return with only a smattering, instead of the thorough knowledge it takes years to acquire. But put the high school into his own township, and these terms of schooling will lengthen into years.

Said a gentleman to me a few weeks ago : "In our district three of us have been sending our boys away to school, at an average expense of \$500 per year each. If we had such a school as you advocate, those boys might be at home for three years yet, and the money thus saved would give good schooling to the whole district."

There is something more precious than money involved in the question whether our young people be educated at home or abroad. The thoughtful parent shrinks from the risks incurred in sending his children away from home during those years in which character is most rapidly forming. What snares may be set for their unwary feet he knows not, nor can he be present to discover and reveal.

The best of influences may, and usually do, surround them in school, but the outside influences, which a teacher cannot control, may ruin them. I have seen—thank God, not many times—one such scene is enough for a lifetime—a boy, apparently pure and good when he came to us, go straight down to destruction before our very eyes and we could not stay him. A mother's voice, a father's hand, might have restrained him, but we teachers were powerless. This is an extreme case, and therefore no criterion, but it signals the danger. What young people do with their evenings has as much effect on the formation of their character as what they learn in school has; parents only can control this.

There are other disadvantages connected with sending young people away from home during their high-school course. Home associations and pursuits are broken in upon; their little taste of town life produces a restless desire for more. Home occupations become distasteful; a few months' schooling in town is sometimes the beginning of the work of severing the ties which bind the young people to their country home.

But if home life and school life go on together, each a part of the other; if the lighter duties of farm life are carried on in connection with study—and such duties are a help, not a hindrance to study—when school life ends there is no painful sundering of ties, no sharp contrasts instituted; the scholar glides imperceptibly into the farmer—man or maiden. And the result of school life is only good, and that continually. To most people school days are happy days; it is worth much to have their happy associations closely connected with home life, thus binding more firmly to that life, instead of drawing away from it, as they do when school days are spent away from home.

Thoughtful observers of country life must notice a growing distaste for it evinced by the children of farmers leaving the farm and going into cities for employment. Doubtless this is owing, in part, to the increased value of farm lands; the same money invested elsewhere will produce larger income. But other influences are at work, influences which reach deeper than the pocket. Surround country life with some of the best attractions of city life, as we can, and our farmer boys and girls will not be so anxious to

leave it. My father was a farmer, as both my brothers now are; the tenderest, most sacred associations of my life are connecteed with farm home-life; it pains me to see this life fading out from our land, hence I would surround it with all the attractions and safeguards possible. Potent among these are good educational advantages *at home*. For this reason I plead with my whole heart for the establishment of township high schools.

How shall the work be accomplished? Section 35 of the school law points out the legal steps. Beyond that, circumstances must decide just what particular course to pursue; as circumstances differ in different townships, no general rule can be given. If there be a village graded school conveniently located in the township, it is well to have the high school in connection with it, for the sake of economy, and for other reasons mentioned when speaking of its advantages as a trainer for teachers. But if there are, as is too often the case, local jealousies or prejudices which militate against this arrangement, by all means have the township high school an entirely distinct institution.

The case of one of our townships may give some valuable hints concerning this work. It is one of the wealthiest country townships in Knox county, settled by people who show their appreciation of education by liberal patronage of higher institutions. At their railroad center—Oneida—is one of our best graded schools. They have an excellent house, with one room not yet occupied, the other four seldom full, a large chapel, which might be used as a study room, if necessary; a fair beginning in library, and apparatus; in short, a good foundation for a township high school. As it is, the school draws many scholars outside the district. Last year tuition received almost equaled the State fund. For the last month the entire school had an enrollment of 240, with an average in its high-school room of 52; 21 of whom were outsiders. In the course of years, most of the families in that township will be represented in that school.

In Walnut Grove, the adjoining township, circumstances are almost equally favorable for the establishment of a township high school. They have not any spare room in their school house, as Oneida has, but this disadvantage is probably counterbalanced by the advantage of their position—they being near the center of the township, while Oneida is quite in one corner, the only thing which works against our plans

These plans are to have the township organize under Section 35, for the purpose of sustaining a township high school. Then rent the upper floor of the Oneida school house—the lower story furnishing ample accommodations for the town school, outside its high-school department—and em-

ploy teachers necessary for successfully carrying on the township high school. Of course, Oneida would pay its proportion of tax, probably about what it now pays, and the township outside, the rest. I have not the data to know just what this should be, but am confident it would be a much more economical arrangement than sending the scholars away to school. But the greatest advantage would be that if the school were sustained by township taxation, more would avail themselves of its advantages.

Wherever there is a township thus ripe for organization, there seems the place to begin. Specific labor on one particular point is more productive than general work throughout the county. One good township high school, in successful operation, will be the best argument for, and incentive to, their establishment in other townships. MARY ALLEN WEST.

READING.

Reading is the foundation of nearly all the education of our schools. No great success will attend the teacher's efforts until the pupils can read intelligently. It is, therefore, a question of great importance, how to teach reading successfully? The acquired faculty of calling words at sight, combined with elocution, constitutes the finished reader. The reason why so few learn to read well, is because they read so little during the first few years in school. Many teachers have the idea that the elocutionary part of reading should be taught at first, and devote so much time to this ornamental, or finishing work, before there is really any thing to ornament, that but little progress is made, and there is a consequent failure both in the structure and finish. What would be thought of a music teacher who should aim to have his pupils sing a few songs, or play a few pieces with great precision and elegance, and neglect the uninteresting practice of first principles? In music, the pupils acquire the fine touch and tone of the teacher largely by imitation while engaged in the necessary drill work. So the teacher of reading should furnish the pupils, *every day*, new lessons. Let care be taken that each lesson be performed as well as possible, but let the idea be always present, that no child can learn to read readily with any small amount of reading matter; and it will be found that when the pupils can call the words rapidly at sight they will soon acquire the ornamental part by imitation.

This method is founded upon true philosophy. No long road can be traveled over, at a snail's pace, during the few years of childhood. . If only

one lesson is given for a week's practice, is it not plain that but one step is taken during this time, on this long road? All agree that children should not be crowded beyond their capacity, but learning to read can hardly be called mental labor. It is the education of the eye to a great extent, and involves but little more strain upon the child's intellect than learning to talk; and it should follow next in order in its education. The crowding in our schools is, to a considerable extent, the result of this neglect of reading in the lower grades. The law that excludes children from school until six years of age, and consequently delays this elementary work, renders it imperative that the very best method be adopted to secure rapid progress. We now find many pupils in our schools, ten and twelve years of age, who are poor readers, and who make slow progress in their other studies for this reason, and not on account of natural dullness: gradually falling behind their class-mates, they become discouraged, lose their interest in school, leave it as soon as possible, and so fail of a good common education, which is the birthright of every child in the State. The teachers are not altogether to blame. They have, in most cases, done their best; but not having studied the true philosophy of progress, and not having themselves received the best instruction, they have failed to secure important results.

There is no progress worth speaking of, and can be none, where the only reading matter furnished the pupils during the entire year consists of the few words contained in our primary readers. If, however, this is the only reading matter the teacher *can* furnish, let the children read these many times over during the term, and so keep before the eye a succession of comparatively new words. The uninteresting humdrum of having the same lesson read day after day is a common and fatal mistake of many teachers in our primary classes. It is nonsense; it is worse, it is a waste of valuable time to teach reading, as some teach music, *by rote*. As one proof of the position here taken, let me ask if the pupils who have plenty of reading matter at their homes fail to become ready readers? I venture the assertion that not one in fifty fails to learn to read well, who, during the first two years of school, is furnished with plenty of reading matter adapted to the capacity of children. And, as all do not have it at home, it must be furnished at school, if much progress is anticipated.

I say to teachers: Your success in primary-school work depends largely upon your pupils' ability to read readily, and their progress in learning to read depends more upon the amount of interesting reading matter furnished them than upon drill in elocution, or the analysis of words. Lend your poorest readers interesting story books, papers, or anything that will in-

duce them voluntarily to continue the practice of reading. The reading of figures is a short work after the alphabet of numbers is learned, but the combinations of letters are almost endless, and it is a work of time to learn to call these endless combinations at sight. In music every new composition is a new combination of musical signs. So in literature. Every new composition is a new combination of words. No thorough musician values very highly a musical education that stops short of the ready performance of a new piece of music at sight, and no teacher in our primary classes should be satisfied whose pupils cannot read intelligently the news of the day at the end of the second school year.

This article might be extended, to show how, in writing, to secure rapid progress, a continual change of copy is necessary; how in numbers, a great amount of practice in addition and multiplication makes the ready reckoner; but I think I have said enough to illustrate the idea, and hope enough to awaken some interest and discussion in what appears to me a matter of great importance.

E. H. ROOD.

DRAWING.

DEAR TEACHERS:—In teaching drawing you and your pupils are receiving more real pleasure along with really useful knowledge than in any other study, if it is taught in the right way. Yes, drawing is a study. Perfect art requires hard study. The first thing is to get the pupils interested in drawing. Straight and curved lines should not be the only thing taught in elementary drawing; young pupils should be permitted to draw faces, to get them interested, and at the same time it will be useful practice for them. Let your school draw as large a face of their teacher as their slates will allow. No matter if it does not look like you. If you find one in the school that resembles you a little, then you have gained something by this exercise. In higher grades, faces of their school-mates should be drawn, and the teacher should be the one to recognize the slight resemblances. The pupils once interested in this way, correct drawing will come fast enough, because practice makes perfect. By doing this you may in some future time reap from your labors by seeing your pupils become great artists, although you may think as little of it as one of Longfellow's characters who shot an arrow into the air, and breathed a song into the air, and

“Long, long afterward, in an oak,
I found the arrow, still unbroke;
And the song, from beginning to end.
I found again in the heart of a friend.”

Next in importance to inventive drawing is drawing from memory. Let six pupils draw an ivy leaf just as they remember seeing it; another six draw a certain house, or church, which they have often seen; another six a clock, a pitcher, a well known flower, tree, etc. Of course the next lesson should be from the original, carefully noticing the mistakes that they made in drawing from memory. For an advanced class, give a description of some very interesting picture, and then let them draw it all from their imagination. The next day bring the picture, so that they may see how near they came to the real. Much pleasure, and much instruction, will be given in this exercise. Occasionally a narrative should be read to the drawing class, after which a drawing, or scene, from what was read should be invented by the pupils.

In a common school a pupil cannot get the necessary time for drawing. To remedy this, drawings should be made out of school hours, and corrected on the next day by the teacher, in the same manner that arithmetic, grammar, and composition papers are treated.

E. B. R.

THINGS WISE AND UNWISE.

1. It is not wise to change a programme on the appearance of visitors. Children are quicker in detecting trickery than are grown people. Lectures on morals fall dead in the school-room where the teacher is a liar in action.

2. It is not wise to imagine, that because one succeeds in keeping an incorrigibly bad boy or girl in school, of necessity, good is done. It is not the part of wisdom to keep rotting potatoes in contact with those that are sound.

3. It is wise to keep before the pupils the thought that mental discipline fits them the better for manual labor. The saddest criticism upon our schools is, that they foster the notion that brown, hardened hands, and coarse, dusty clothes are degrading.

4. It is unwise, as well as unjust, to make the little scholars the recipients of the punishment due the older ones. Nothing makes a teacher more contemptible in the estimation of scholars in general, than the knowledge that he is too cowardly to be just.

5. It is not wise for a teacher to attempt to drown the noise in the school-room with greater noise. That school has the most disorder, whose teacher makes the most of it.

6. It is wise to suffer pupils to sit in bad air, rather than to have them struck with cold currents from the outside, as they sit passively at their desks. One would better be immersed in carbonic dioxide, if taken out before he drowns, than to have the air at Zero drive from his shoulders and throat that at seventy degrees.

7. In case it becomes necessary to purify the air, by raising the windows, it is wise to have the children brace themselves against the change in temperature, by engaging in some muscular exercise.

8. It is wise, when a scholar asks you a question that you can't answer, to say, "I do not know."

9. It is wise to make it a point not to be asked the same question twice without being able to answer it, if its answer lies within your reach.

10. It is not wise to engage with children in their sports, unless you can excel in many of them. If you can't jump, nor run, nor catch a ball, nor wield a bat, nor turn a hand-spring, nor skip the rope, nor shoot an arrow, nor spin a top, as well as the majority of your scholars, you had better be a looker-on. It is not familiarity, so much as ignorance, that breeds contempt.

C.

OFFICIAL.

School Officers—Oath of Office.—The Supreme Court of Illinois, per Justice SHELDON, has recently filed an opinion that will be of interest to school officers. Section 25, Art. V, of the Illinois Constitution, which provides that all civil officers shall take a prescribed oath of office, except such inferior officers as may by law be exempted, is held not to require township school officers to take the oath. The Legislature having provided the necessary qualifications for such officers, and having neglected to require the oath as one of the requisites, it is presumed that they intended to exempt such inferior officers from taking the oath. *School Director's District No. 13, T. 40 Cook County vs. Clark Roberts, et al.*—*Western Jurist.*

EDITORS' DEPARTMENT.

Reports of corruption and fraud fill a large part of our public prints : and "investigation" seems to be the chief business of Congress. The method of "killing off" the candidate of an opposing party, is no longer by an attack on his political principles, nor by unearthing some unfortunate letter that he may have written in past years; but, by showing some dishonesty in his previous transactions, or, which is about as well, by raising a suspicion of dishonesty. For, the public mind is so aroused on these questions that it is ready to receive as true almost any insinuation against a public man, and that without much question or canvass.

No doubt, there is much corruption to be found among men in office, but they are not all thieves; neither are they so much worse now than ever before; nor are they, as a whole, any worse probably than the average of the community, nor worse than those who are *investigating* them. For, it is very evident that the main object sought in this immense *hullabaloo* is not to catch rogues nor to promote general honesty, but simply to make "political capital." And, yet, it may be a hopeful state of public opinion when the surest way to destroy a politician's "availability" is to show that he is dishonest.

Almost the only thing that Congress has done, except to investigate, has been to take steps towards reducing the salaries of some of the public servants; and its action in this respect has been no more honest than in the other, for the end sought is the same, namely, political capital. These proposed reductions are some of them contemptible: and it would seem that the expense of Congress while passing the measure would more than equal all that the reduction will save. But, that is neither here nor there: for, it is supposed that the dear public has certain strong prejudices which are aroused just now, and that the way to get votes is to pander to those prejudices. The editor of the *Galaxy*, in the May number, has some very truthful and sensible remarks on this subject. Not one, perhaps, of our public servants is paid more than a fair amount for the talent and character which his place demands; and most of them are paid vastly less. Now, the public service demands good ability, as well as experience and honesty. If the pay is made less than a fair equivalent for these, one of three things must follow; an inferior order of talent must be employed, or the public must take service for which it does not pay, or the incumbent will use his place to advance his pecuniary interests, in some irregular way. In other words,

he is likely to steal, and to justify the act on the ground that he can get a fair compensation in no other way. Surely, the diminishing of deserved pay is a strange method of promoting honesty in public servants.

We shall have made a long stride towards a right state of things when we pay a fair amount for all kinds of public service, even to school officers and to trustees of public institutions. When the public ceases to be a mendicant, pays a fair price for the talent it needs, and then holds its servants rigidly to a faithful and honest performance of duty, we shall have done much to reduce the number of incompetents and scoundrels in the public service, from our state Legislatures, down.

The principle of just and proper pay for the amount and kind of work done is quite as applicable to teachers' salaries as to any other public service. Very possibly the average of teachers' salaries is quite as high as it ought to be, for unquestionably a multitude are employed in our schools whose work is worth little or nothing; many are doubtless only a negative quantity; and, yet, the poorest often get nearly as much as the best. This not only gives rise to a feeling of injustice on the part of the deserving, but it removes one of the strongest incentives to strive for excellence on the part of those who by pains-taking could render themselves much more efficient than they are. Every business man knows that discrimination and a practical recognition of excellence have a powerful influence in securing the best workmen, in any department of labor. But many of our careless, inefficient, unpaid school officers do not seem to have any more appreciation of this truth than a communist, or a blatant advocate of trades unions.

We call especial attention to Prof. FORBES' circular concerning the Natural History School at Normal this summer. Judging from results last year, and from the prospect for this year, we think we may truly say that no better opportunity for successful study of the topics announced can be found on the continent. And the expense will be very moderate.

In the March number of *THE SCHOOLMASTER* an article on "The Centennial Swindle," that appeared in *The Rock Falls Progress*, was commented upon somewhat severely. Since the publication of the March number we have learned, from various sources, that the opinions of the author of the criticised article were held by other teachers in various parts of the State. A simple statement of the facts may not be amiss.

At the Rock Island meeting of the State Association, State Supt. ETTER, Dr. GREGORY, of Champaign, Dr. WALLACE, of Monmouth, J. I.

PICKARD, of Chicago, and Dr. SEWALL, of Normal, were appointed managing committee. Their duties were as follows: To secure a sufficient fund to prepare the articles for exhibition and to get them into position at Philadelphia; to disburse this fund for the purposes specified; to enlist all the schools possible in the matter, and to have general supervision of the whole matter of the exhibit. For all of their services, and they were not trivial, they receive—*nothing*. Nay, some if not all of the committee have paid all traveling expenses to committee meetings, and have contributed materially to the fund in *cash*. S. H. WHITE, of the Peoria Normal School, has been selected to go to Philadelphia and put the material into position. No wiser selection could have been made in this or any other State. For his labor he receives—*his expenses*. He employs a substitute to attend to his ordinary duties, to whom he pays from his own, by no means large salary, one hundred and fifty dollars a month. He must be away from his work about two months. Three hundred dollars is his contribution to the "Centennial Swindle."

These are the facts. We feel like apologizing to our readers for this brief allusion to the subject, but some honest men and women seem to have been misled in a very simple matter, and may thank us for putting them right.

The results at present writing seem to be about as follows: Nearly two car loads of material have been gathered at Champaign, and there, under the personal direction of Dr. GREGORY, have been arranged in cases made in the Industrial Shops, have been loaded and are now on their way to the Quaker city.

The exhibit is said to be very gratifying. We hope to speak more in detail next month

Some years ago N. E. WORTHINGTON of Peoria, was County Superintendent of that County. The idea of a County Normal had taken fast hold upon him, and through his endeavors, chiefly, a school was started with Mr. WHITE at its head. It is now snugly located in a commodious building, built by the city, and occupying a prominent site upon the "bluff." The attendance averages about a hundred. The pupils are thoroughly trained in academic work, and what is better, in the actual work of teaching. They serve as novitiates for three weeks in a class-room. They are then put in charge of a room and its care rests entirely upon their shoulders. A competent training teacher, Miss Maggie Chalmers, gives them constant supervision. For this professional training the county pays five thousand

dollars per annum, or, in other words, adds about seven dollars a month to the local salaries of these teachers.

Does it pay? Let us see. At their admission they represent the average teacher of the average county. At their departure they represent the same teacher *plus* from one to two years of special preparation. Who would hesitate between the entering student on one hand and the departing student and seven dollars on the other?

The result has been all that the friends of the school anticipated. It could not be otherwise with S. H. WHITE at the head.

Why do not other counties profit by the example? They might combine their forces until thirty such institutions should pour their graduates into the common school; the result would be an immense saving, for the common schools under such tuition would be trebled in effectiveness.

The Kansas legislature has retrenched. That noble assembly of Solons has taken the bull by the horns. They knew where the leakage was! Oh, yes! There is a Normal school at Emporia. It costs the State \$13,000 a year. Think of that! Thirteen thousand dollars a year, my masters! Well, they have plugged that hole in the treasury. No thirteen thousand dollars is to be thrown away this blessed year of grace. Each of the 400,000 citizens may button his pocket over his three-cent piece with the proud consciousness that it is safe from the sordid grasp of the patent schoolma'ams and schoolmasters. But we forget. They did vote \$25,000 to show the visitors to the Centennial the grandeur of Kansas and its school system. This discourages us. We had indulged the fond hope that the good work might go on until that effete institution, the common-school, was summarily disposed of.

GENERAL SHERMAN thinks that we are drifting away from republican simplicity, because high-school instruction somewhere costs five times as much as primary. How is it at West Point, General?

WALT WHITMAN, the poet, is said to be suffering from poverty, and he is about to issue his complete works as a measure of relief. ROBERT BUCHANAN proposes a committee to collect subscriptions for at least five hundred copies; or, if one thousand can be sold, "So much more honor for England, and so much more shame to the literary coteries which emasculate America." Well, we have no objection to Englishmen's buying WHITMAN's trash, if they want to do so; but we have no use for his disjointed *yawp*. If he is poor, he had better take off his coat and saw wood or dig ditches. There are ways for an honest man to get a living, even if he is not a poet.

We clip the following from a letter recently written from Albany, by a correspondent of a newspaper:

The constitutional convention of 1846 fixed the pay of members of the Legislature at \$300 for the session. The session was then computed at 100 days. It has considerably exceeded that length of time, however, every winter, so that the members, as a general thing, have served from four to five months for the unreasonably small sum of \$300. This amount, of course, was not sufficient to defray expenses, and the fact that it has not, has generally been regarded as placing a premium on corruption. That is to say, members who came here honest, might, in time, come to justify themselves, to a certain extent, in taking bribes, on the ground that they were working for the State for wretchedly small pay. Four years ago an amendment passed the Legislature, increasing the pay to \$1,000 for the session. A year later another amendment was passed increasing the amount to \$1,500 annually. This amendment was subsequently ratified by the people, and under it members for the first time were elected to the present session.

No little curiosity has been felt all over this and other States here at the East, to learn whether this experiment has proved satisfactory, whether increasing the pay of members of the Legislature has secured a better class of men. I have now spent several days in studying the complexion of both Houses, and am glad to state, as the result of my observations, that the experiment has been attended with the most gratifying results. The New York Senate to-day is the finest body of State Senators which has been elected in very many years. The Assembly, or lower House, is likewise far superior in ability and integrity to any previous body chosen in many years. The result affords a most striking commentary upon the theory that the public service should be well paid.

We shall never secure faithful service, nor root out bribery and corruption, until we pay *all* our public servants liberally for their work. This is equally true of legislators, trustees of public institutions, school officers and all the rest. Let their number be reduced to a reasonable limit, pay them well for their work; then demand faithful and efficient service, and punish any dishonesty or bribe-taking most severely. This is plain, straightforward justice and common sense; and the sooner our people act accordingly, the sooner we shall have efficient, trustworthy, and honest public servants.

We are glad to notice that many of our exchanges are copying our articles very freely. That is right, brethren; we know our articles will do your readers good, and you are entirely welcome to use them. But, please, don't forget to give us credit; we are sorry to say this has happened in a few instances.

We have just received the following:

The next annual meeting of the National Association will be held at Baltimore, Maryland, on Monday, Tuesday and Wednesday, the 10th, 11th and 12th of July. A most cordial and generous welcome will be extended to it by the State and City authorities, and every preparation will be made to insure a success worthy of the Centennial year of the Republic.

The general order of arrangements and programme of exercises will be issued in circular form during the month of May.

A session of the first International Educational Congress ever assembled in this country will immediately follow, occupying the three remaining days of the week. The Congress will be organized on Wednesday evening, July 12th, and receive its welcome from the National Educational Association on Thursday morning, at which time its regular order of business will be commenced. Many distinguished foreign educators and publicists will be present to participate in the deliberations of both Bodies, and subjects of the highest interest and importance will be brought up for discussion. The plan of the Congress will be made public at an early day.

Editors of Educational Journals, and of the Press generally, are respectfully requested to give this announcement a place in their columns.

WM. F. PHILIPS, President Nat. Ed. Association.

Supt. SLADE of St. Clair County reports that his County returns the handsome sum of two hundred and twenty-six dollars as its contribution to the Centennial fund.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

What are known as the suburban principals are much given, about this time, to uneasy reverie. They meet each other with anxious looks and inquiries. It is thought that the celebrated Hamlet's celebrated soliloquy on life and death, has been subjected by them to serious study and frequent declamation, with a view to adapting it to their circumstances, and changing it from a soliloquy to a concert exercise—from a solo to a chorus. This is how it happened.

Within the last five or six years, the Chicago Real Estate Man has cast his eyes upon ye pedagogue, and said unto himself: "Behold, here is one with whom it were well to labor. He hath some shekels, many visions of rustic felicity, and the the holy calm of a rural habitation. He hath Utopian longings for a society where the clamor and the temptations and the evil practices of the great city are unknown. He loveth the song of birds, and oft he singeth of

'Buds which the breath of summer days
Shall lengthen into leafy sprays.'

I have some broad acres on the line of the ——— road, at — dale, and others at — Heights, and still others at — Park. If I know myself, and I think I do, I can make a trade with him; for the balmy zephyrs of the beauteous prairie will hush the buzz of the frisky but intrusive musketoe. Verily, I'll go for him."

Now the Real Estate Man has an eagle eye, and he is skilled in reading human character. He charms his victim with a piercing and continuous gaze. He sought out the pedagogue, and with eloquent tongue and oleaginous, he told the advantages of life in the country. With a few bold strokes he sketched the outlines of rural felicity. Did the victim speak of distance? He was told of cheap and rapid trains to be, and the bracing air and health-giving effects of an ante-sunrise race with the engine, for the depot, and the inevitable intellectual progress that was to come from reading the morning paper on a comfortable seat in a warm car. It is needless to outline the process by which the victim was secured. The "easy terms" of the Real Estate Man, beguiled the innocent pedagogue into all the Dales and Heights and Parks and Woods within twenty-five miles of the city, where he is struggling with building-loans, trust-deeds, mortgages and monthly payments, while the remnant of his increase and multiplication that has escaped death, by drowning, in the basement of his "rural home," spends the weary day in robbing birds' nests, and stoning bull-frogs.

Nevertheless these things never appear to the suburban pedagogue thus. He daily adds to the comforts and luxuries of his quiet retreat. He looks beyond the struggles and trials and disappointments of the present to a time when these will be changed. His prescient eye looks forward to the distant time when the tree which his hand has planted shall make.

"A shadow for the goontide hour,
A shelter from the summer shower."

and he confidently believes that generations of his descendants yet to be shall enjoy that shelter, and bask in that shadow, blessing meantime, the memory of the suburban pedagogue.

But the Real Estate Man suffers not his brain to become dormant. If business becomes dull in one direction he would fain stimulate it in another. Trade in suburban lots having reached a state of hopeless stagnation, trade in city property must be stimulated. The R. E. S. is fertile in expedients. Like him, who was cast out of heaven, of old, he puts on any livery that best suits his purpose. Withal, he lacks not audacity. Accordingly he hesitates not to try his arts upon the grave, and dignified, and honorable Board of Education. Under one disguise or another he whispers in the ear of unsuspecting members, inspirations fatal to the existence of the suburban pedagogue. He tells of impending storms that, by impeding suburban trains, will leave, at critical moments, great schools, fatherless. Again he instils a subtle poison into other ears about the identity of "tax-eaters" and "tax-

payers," and recites an incantation to produce a storm, because of the apparent absence of that identity in the case under consideration. And the Chicago Board of Education decrees that the suburban principal shall no longer be. "After the close of the present school year, the Principals of the High, Division High, Normal, Grammar, and Primary Schools, shall reside within the corporate limits of the City of Chicago, and in case of their non-compliance with this rule, they shall be deemed to have resigned, and their places shall be declared vacant." Hence the reveries, anxieties, inquiries, tragic colloquies, and literary longings of the suburban principals. "Whether 'tis nobler in the mind," and safer for their wives and children, who must have bread, to forsake their cherished homes, breathe again the city's polluted atmosphere, and bear "the oppressor's wrong, the proud man's contumely,"

"The insolence of office, and the spurns
That patient merit of the unworthy takes,"

or like LEWIS, by resigning, end the whole sea of troubles, which opposes them, is the question which agitates the minds of our rural friends, and causes their "native hue of resolution to be sicklied o'er with the pale cast of thought."

The Chicago contribution to the Centennial Exposition has been started on its journey. The following bill of particulars is condensed from the index which accompanies and explains the work. It should be remembered that pupils of the grammar schools are divided into eight grades, numbered from the lowest, and that the ninth, tenth, eleventh and twelfth grades are composed of high school pupils in every instance.

The Chicago work is reported under four heads—I. ENTIRE GRADE WORK, which includes all the work done by eighth grade pupils, and consists of three handsome volumes of 400 pages each.—II. ENTIRE CLASS WORK, which includes all work done by a single selected class, of each grade named, on one specified topic, and includes three volumes in English, from each of the third, fourth, fifth, sixth, seventh and ninth grades, and two volumes in the same language from each of tenth, eleventh and twelfth grades, while one volume in German is furnished by each of the fifth, sixth, seventh, eighth, ninth and tenth grades. Under this head there is exhibited, of drawings, two volumes from each of the fifth, sixth, seventh, eighth and ninth grades.—III. SELECTED PAPERS, which represent one-tenth of all pupils not represented under the previous heads, and which consist of an aggregate of eleven volumes, in English, from the third, fourth, fifth and sixth grades, and three volumes in the same language from each of the seventh and eighth grades; also one volume in German from the fifth grade, and two volumes from the ninth grade. Under this head comes, too, of drawings, five volumes each from the fifth and sixth grades, and two volumes each from the seventh and eighth grades.—IV. SPECIAL WORK, which consists of eight volumes of specimens of penmanship, one volume being German, five volumes of special drawings, one volume of German compositions, a portfolio of drawings and maps, a handsome volume prepared by pupils of the Lincoln school, containing a manuscript history of the territorial growth of the United States, and illustrated by portraits and maps, a volume furnished by the pupils of the Jones school, illustrative of sixth grade work, a history of Chicago, written by pupils of the King School, a volume of superb mechanical drawings made by Mr Peabody's Evening High-School Class, a volume of marked examination papers, a volume of English composition written by pupils of the Hayes school, a volume of words built by pupils of the Sangamon Street Primary school, from certain letters given them, a volume illustrating work done by a class of deaf mutes, recently organized, three framed maps, two framed crayon sketches, one of them from life, and two oil paintings, one of them an exterior view of the Burr school building, and the other an interior view of one of the divisions of the same school. All the work under the first three heads was impromptu.

Several orders for THE SCHOOLMASTER, received from Kenosha County, Wisconsin, remind us that the spirit which, long ago, made this beautiful little county one of the banner counties of the west, still lives there. An unusual number of the very foremost educational men of Wisconsin at the present time are the legitimate

product of that spirit. The same may be said of the very respectable percentage of Kenosha teachers, now at work in Chicago. The present County Superintendent, DAVID H. FLETT, Esq., has grown up in the schools of the county, and is doing careful and effective work in the direction of educating and training a younger generation of teachers. Great help is derived in this matter from the presence in the city of Kenosha, of an excellent High school. That city, unlike many richer towns, has never neglected its High school, but has uniformly and generously supported it as its chiefest attraction and glory. The loss sustained by the election of Mr. Bannan to the principalship of the Haven school, in this city, is happily repaired by the selection for principal of the Kenosha High School, of PROF. T. P. MARYATT, late of Peterboro, New Hampshire.

The April meeting of the Principals' Association was characterized by the usual interest and harmony of that body. The absence of "filthy lucre," and the fact that the time of its presence was still unknowable, excited a chastening influence on all present. Superintendent PICKARD scarcely needed to remind the gathering of the trinity of virtues, which its absence ought to promote. Nine weeks without a cent, and no immediate prospect of a change had already produced very decided *economy*, a *patience* not wholly, perhaps, despairing, and probably very generally had promoted a *christian policy* toward those in authority, who labored to extract from unwilling tax-payer the wages of the teachers.

The local announcements for the month were not of special importance. The somewhat dubious promise of better weather has been sufficient to induce the Board of Education to rescind a resolution adopted last fall, requiring school buildings to be kept open from 8 o'clock, A. M., to 4 o'clock, P. M., and during the summer the buildings may be kept closed until half an hour before the beginning of each session.

The question, "How shall we make reading an intellectual exercise?" was the topic of discussion for the day. As frequently happens the discussion increased in interest till the hour for adjournment summarily closed it. The speakers were Messrs. PICKARD, DELANO, BAKER, MERRIMAN, SLOCUM, MAHONY, G. D. BROOMELL, J. H. BROOMELL, HANFORD, KIRK, DOTY, BELFIELD, and BRIGHT. A very great diversity of views was manifested, and no conclusion was reached. At the next meeting of the Association its members will endeavor to answer the question: "What can be done to improve the morals of our schools?"

The teachers were paid forty per cent. of one month's salary, on Saturday, April 8, 1876. Since it was just four-twenty-fifths of the salary due at that date, it could hardly be regarded as the "half-loaf" which has come down from the "twilight of fable" as "better than no bread." Some, however, who were in imminent danger of a trial of the latter alternative, achieved what the psychologist would call a "real apprehension" of the truth of that particular tenet of proverbial philosophy. When the balance of the "loaf" will be forthcoming is set down as The Problem of the Future.

The Board of Education, Superintendent, Principals, Teachers, Course of Instruction, and School System of Chicago have been receiving some not very elegant attentions from a morning paper, recently. It is generally understood that these attentions are to be credited to an editor of that paper who is also a member of the Board of Education; and their peculiar character is said to be due to the fact that on a question of honor and veracity relating to representations made by the editorial member aforesaid to members of the Common Council about the estimates submitted to the latter body by the Board of Education in reference to the appropriation that was necessary for the salaries of teachers for next year, there was a decided difference of opinion. The editor was on one side, and all the other members of the Board seem to have been on the other. The newspaper in question delights in calling these diatribes a "crusade," and usually, as well as very appropriately, prefixes to that significant term a modifier, consisting of the editor-inspector's name in the possessive.

EDUCATIONAL INTELLIGENCE.

REPORT OF ATTENDANCE FOR MARCH 1876.

	No. of Days of School.	Av. Number Enrolled.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	SUPERINTENDENTS.
Bloomington.....	30	3 087	3 351	93-3	473	814	Sarah E. Raymond.
Peoria.....	30	3 049	2 500	90-4	370	412	*G. W. Mason.
Hannibal, Mo.,.....	18	1 921	1 228	90-7	158	360	Henry Raab.
†Belleville.....	23	1 710	1 376	80	305	434	J. F. Everett.
Rock Island.....	30	1 449	1 253	86-3	.....	236	John T. Long.
Warsaw.....	23	966	791	93	81	410	L. Gregory.
Moline.....	21	839	878	95	41	361	C. P. Rogers.
Marshalltown, Iowa.....	30	823	705	95-3	87	357	J. G. Shedd.
Macomb.....	19	738	659	94-4	25	210	M. Waters.
†Morris.....	20	657	546	83	275	113	T. F. Dove.
Shelbyville.....	30	586	468	90	41	65	W. H. Lanning.
†W. Champaign.....	23	563	484	85-7	29	125	O. E. Haven.
Evanston.....	21	537	405	92-3	115	135	C. H. Rew.
Pontiac.....	20	535	484	90	356	44	F. A. North.
†Carthage.....	20	481	315	84	186	195	A. Bayliss.
†Sterling, 2d Ward.....	30	480	408	94-9	98	202	P. R. Walker.
Rochelle.....	20	462	396	94-5	34	54	D. H. Pingrey.
†Lacon.....	30	387	325	84	84	78	C. A. Singletary.
Collinsville.....	23	340	276.7	86	77	.....	M. C. Connelly.
†Petersburg.....	20	323	265	82	.....	110	H. J. Sherrill.
N. Belvidere.....	18	267	231	91-8	19	58	I. N. Wade.
†Rantoul.....	23	232	186	85	132	45	Wm. E. Lehr.
†Marine.....	23	221	188	89	63	54	A. B. Strowger.
Anna.....	30	213	146	88	163	27	G. P. Peddicord.
†Walnut.....	30	111	93	84-3	74		

NOTICE.—These reports must reach us before the 16th of the month to insure publication.
 †New Rules. *Principal High School.

Peoria.—The twentieth annual report of the Board of School Inspectors is received. It is a book of 66 pp., and contains the usual statistics, reports, rules, etc.

The expenses for the year were \$64,131.98. The school population is 8,749. The average attendance has been 2,513. There have been 1,928 pupils in private schools. There are six district schools and a high school.

The principal of the high school is E. P. FROST; of the second district, J. E. PILLSBURY; the third, Miss S. S. LINES; the fourth, N. MATTHEWS; the fifth, Miss A. L. GARLINGHOUSE; the sixth, JOHN X. WILSON; the seventh, Miss DELLA HARRINGTON.

Two teachers are employed for the evening school, and one for teaching music. No superintendent has been employed since the resignation of Mr. Dow. The president of the Board thinks that officer can be dispensed with permanently, if the duties of the secretary are sufficiently enlarged. Indeed, Mr. BINNAN regards such a person as a *hindrance* in a city the size of Peoria. This seems to us a serious mistake. The principals are doubtless efficient, but we cannot see how the unity of the system can be preserved if the heads of the several districts are left to their own discretion in the management of their several schools. Why not assign to a competent superintendent the duties of secretary? There will be ample time for efficient supervision, arrangement of courses of study, instruction of teachers in matters of method, the selection of suitable assistants, and the other multifarious duties incident to such a position. There are few kinds of business in which sixty-seven operatives, however skillful, would be left without one supervising head.

We commend Mr. POWELL's paper, published in the February SCHOOLMASTER, to the consideration of the Peoria Board.

The debt seems to be about \$3,800,—a very small matter to a city of 30,000 inhabitants, if that includes the entire liability.

The report was printed by N. C. NASON. It is, consequently, well done.

THE SCHOOLMASTER spent a day recently in wandering among the city schools. Not all were visited, but he had the pleasure of a call at the second, third, and sixth districts, and the County Normal.

Messrs. MATTHEWS, PILLSBURY and WILSON have occupied their respective positions for many years. Their buildings are very large and are well filled. The order is excellent, and things generally seemed to be in good condition. The building in the second district is badly constructed. If the intention was to kill off a generation of teachers every few years, the object has been attained. Think of a hundred little folks, from six to ten, in a single room, with the responsibility of discipline resting on the unfortunate shoulders of the principal of the room! The ability to manage so many restless, active children, and to keep them in anything like good order is rare; it seems to be possessed, however, by those whose rooms were visited, in an unusual degree. Everything was quiet and orderly. Such drain upon the vital forces is too great to be endured for many consecutive years without exhaustion. In the last report, noticed above, the President devotes some of the space to the discussion of "overworking children." Has it occurred to the school officials that there is less danger in that direction than in overworking teachers? If anybody needs to live in the sunshine, to feel the bounding pulse of health in every tissue, it is the teacher. In too many cases, the labors of the day leave her worn in body and soul, and the happiest minute of the three hundred and sixty is ticked at four o'clock. Enthusiasm wears out, and daily duties are wearily performed. Salaries should be sufficiently high to permit rational and health-giving recreation. The concert and lecture must contribute their cheer to the tired teacher. Every cent judiciously expended in such ways comes back to the children in double quantity. But we have touched a tender spot—money—and we must stop.

Alexander County.—All persons who desire to teach in the public schools of this county, are requested to meet at the high school room on Wednesday, the 19th inst., at 2 o'clock, p. m., for the purpose of organizing a Normal class to receive a thorough drilling in all those branches required by the school law of our State. All teachers, and those wishing to teach, throughout the county, are earnestly requested to join the class as soon as possible, or give some weighty and convincing reason to me for not doing so. The session will continue from four to six weeks. Tuition, gratis. The class will be under the direct supervision of experienced normal teachers. At the close of the session there will be a public examination, and those holding certificates about to expire, are respectfully informed that said certificates will not be renewed without re-examination; and it is further expected that every teacher will exhibit an advance of from five to ten per cent. on the marking of last year. It is hoped and expected that every person who intends to occupy the position of teacher in this county, will make an earnest effort to attend.

School officers and all others interested in the cause of education are cordially and earnestly invited to encourage us by their presence.

Persons attending are requested to bring such text-books on each of the branches as they may have in their possession.

Cairo, Ill., April 17, 1876.

MRS. P. A. TAYLOR, Co. Supt. of Schools.

Macon County.—We had the pleasure of visiting Decatur on Saturday, the 26th of February. Of course, the schools were not in session, but the teachers were holding their Saturday Institute. When we entered the room, they were discussing Mr. Nordhoff's *Politics for Young Americans*,—a book which they are studying by a series of regular lessons. The author's positions were attacked and defended with much freedom and force. After recess, came a series of readings on practical topics from the teachers' journals,—these readings had been previously selected and assigned by the superintendent. A little discussion followed, then some pointed suggestions by the superintendent, and a few remarks from the SCHOOLMASTER closed the session. All seemed to take a thorough interest in the proceedings; and

we thought we had rarely been in a similar meeting when the exercises were so sensible, practical, and devoid of any nonsense. The session was held in the High-school building, and we could but remark the convenience, taste and neatness displayed in all the rooms, in the yard, and in all the surroundings. Plants and flowers in blossom, an aquarium, cases of stuffed birds, cabinets, and libraries rendered the place both attractive and instructive. We examined several sets of very neat exercises that have been prepared for exhibition at the Centennial. We, left Decatur much strengthened in the opinion which we have long held, that few towns of the State are favored with better teachers or more efficient schools than Decatur; and that Mr. GASTMAN, to put it mildly, is in the front rank of the best superintendents in the west.

Clark County.—We will open a Normal Institute at Martinsville, Ill., July 24, 1876, to continue five weeks.

The work of the Institute will be upon—

I. Botany—Morphology and Analysis.

II. Zoology—Suited to the Common Schools.

III. Physiology—With life-sized chart and skeleton.

IV. Natural Philosophy.

V. Eng. Grammar, Reading, Com. School Arithmetic, Geography, and U. S. History.

VI. Spencerian Penmanship—Analysis and method of teaching.

VII. School Economy—By Lecture.

The work done in the Elements of Natural Sciences, Grammar, Arithmetic, Geography and History, will be independent of text-books. This will **LIGHTEN** **EXPENSE** of teachers.

A model class of intermediate grade, by which methods of instruction will be illustrated, will be in attendance.

The Martinsville Public School Board has kindly granted the use of the public school building, and with its furniture, supplemented by a good organ and music books, we feel confident that this Institute will be very pleasant and **PROFITABLE** to all its patrons.

Boarding in good families can be had at \$3.50 to \$4.00 per week.

Tuition, in Normal department. \$5.00, payable in advance.

Tuition, in Model Class, \$1.50.

Applications for admission should be sent in immediately, that full arrangements may be made.

J. C. COMSTOCK,
JOHN K. FAILING.

NATURAL HISTORY SCHOOL.

A second session of the Normal School of Natural History will be held under the auspices of the Museum of the Ill. Nat. Hist. Society, at Normal, Ill., provided fifty applications are received, commencing on the 25th day of July, and closing on the 25th day of August, 1876.

The object of this school is to encourage and assist a more general, systematic and intelligent study of nature; and, to this end, especial attention will be given to the instruction and training of teachers of natural history, both in the subject-matter of science, and in the most successful and improved methods of instruction. It is not designed, however, to confine the school to teachers. Those whose tastes or purposes incline them to special scientific study will also be admitted, and promising high-school pupils will be accepted on recommendation of their teachers or superintendents. These are requested to recommend only such pupils as have a special aptitude and liking for natural history studies.

COURSE OF STUDY.

Complete provision will be made for the study of 1. Comparative anatomy of vertebrates. 2. Comparative anatomy of invertebrates. 3. Analytical zoology, except that of insects and protozoa. 4. Analytical entomology. 5. Systematic and

structural botany of phænogams. 6. Systematic and structural botany of cryptogams.

In each of these branches classes will be organized for *beginners*, and every facility will also be afforded for *advanced* or *special* study.

Special arrangements can be made for a few students in geology and chemistry. if any wish to pursue these branches.

MATERIAL, INSTRUMENTS, ETC.

Zoological material from all parts of this State, and marine animals from the Atlantic, will be had in great abundance for dissection and analytical study. Specimens of the following groups may be expected:—polyps, sea-urchins, star-fishes, brittle-stars, basket-stars, holothurians, worms—marine and terrestrial—horse-shoe crabs, hermit crabs, lobsters, crawfishes, common crabs, and many smaller crustaceans, myriapods, spiders, insects, ascidians, brachiopods, large bivalve, gastropod and cephalopod mollusks, lampreys, ganoid and common fishes, including a few sharks and skates, tailed and tailless amphibians, lizards, snakes and turtles, birds and mammals.

Botanical specimens, including ferns and mosses in fruit, will be obtained from the center and from both extremes of the State. The scientific library of the Museum, and its fine zoological, anatomical and botanical collections will be open to students. The study and recitation rooms of the State Normal University, including its thoroughly furnished zoological laboratory and apparatus, are offered for use free of charge. A sufficient number of good microscopes will be provided, but expenses will be lessened for students who furnish their own. A limited quantity of collecting apparatus can be supplied for excursions; but those having guns, dip-nets, minnow-seines, &c., will do well to bring them. Hand magnifiers and dissecting instruments will also be needed; but those not already possessed of them are advised to defer purchasing until their arrival here, where exactly such as are needed for the work can be obtained.

SUPPLY AND EXCHANGE OF SPECIMENS.

The zoological and botanical material above mentioned, will be furnished at cost, or will be *exchanged* for other specimens; and will be had in such quantity that every student wishing to do so may take away a full set of typical specimens.

Those purposing to attend are therefore earnestly advised to collect in their own localities and bring with them for exchange as much material as possible. By a little activity in this direction, it will be easy for them to secure, at no pecuniary cost and with great profit to themselves, all specimens necessary for study at the school as well as duplicate sets for future use.

METHODS OF STUDY AND INSTRUCTION.

It will be the constant aim of the directors to combine the advantages of field-work and laboratory study, and these will be made the prominent features of the course. All the work of the classes will be done under the guidance, and subject to the criticism, of the instructors; and daily lectures, illustrated by charts, black-board drawings, preparations, etc., will be given upon the groups studied in the laboratory, and upon related subjects. Regular arrangements will be made for excursions to the best collecting grounds in the vicinity. These can be reached conveniently by rail at a trifling expense.

The programme will be so adjusted that each member of the school can take at least four of the six subjects above named; but the experience of the last session leads us to advise students to attempt no more than they can do thoroughly *at the time*. Each instructor will be at liberty, during half the day, to guide and assist the work of those who wish to pursue special studies.

The evenings, except for occasional general lectures, will be left free for private study, or for attendance upon "quiz classes," at which students will be examined upon the results of the previous work.

Instruction in comparative anatomy will be based throughout upon dissections by the students, of typical animals of the important groups. The study of analytical zoology will consist largely in the determination of species by the use of Jordan's *Manual of Vertebrates*, (now in press,) and several synoptical tables of

the genera and species of the most important groups of invertebrates, which are now in course of preparation, and will be furnished to students at a few cents each. Similar synoptical tables will be used in cryptogamic botany; while in phænogamic botany, Gray's Manual will be the standard.

Books of reference in zoology and botany will be useful but not indispensable. The best of these can be obtained here at the usual prices.

INSTRUCTORS.

The first of the above branches will be in charge of Dr. B. G. WILDER, professor of Zoology in Cornell University. The second branch has not yet been fully provided for. The work of the third will be conducted by Prof. S. A. FORBES, teacher of Zoology in the State Normal School, and curator of the Museum of the Ill. Nat. Hist. Society; of the fourth by Dr. CYRUS THOMAS, State Entomologist; of the fifth by Dr. J. A. SEWALL, professor of natural science, State Normal University; and of the sixth by Prof. T. J. BURRILL, professor of botany and entomology in the State Industrial University. All the above named gentlemen were instructors in the school of last summer at this place. Dr. WILDER was also instructor at both sessions of the Penikese school, and at the school in Peoria.

MEMBERSHIP.

The number of students will be limited to seventy-five, and applications will be considered in the order in which they are received. All names should be in before the 15th of June, as the final list will be made up at that date. Applicants will please give age, sex, occupation, and the studies they wish to pursue.

EXPENSE.

The school must be entirely self-supporting, and the tuition fee for the session has been fixed at \$15. Material for dissection, if purchased, will cost pupils from \$2 to \$6 each, according to the work undertaken. Board was furnished students last summer at from \$3.50 to \$4 a week, and can doubtless be obtained at the same rates this. As the tuition has been placed at the lowest sum which will cover necessary expenses, the directors are compelled to stipulate, in order to protect themselves from personal loss, that all whose applications have been accepted and not withdrawn by the 15th of June, shall be considered responsible for the fee.

Further information will be cheerfully furnished by either of the undersigned.

E. A. GASTMAN,	} DIRECTORS.
<i>Decatur, Ill.</i>	
S. A. FORBES.	
<i>Normal, Ill.</i>	

SOUTHERN ILLINOIS NORMAL.

The second term, which was marked by earnest work and steady advancement, closed on the 24th of March. The enrollment for the term was 214; that for the corresponding term of last year was 181. Our ranks were considerably depleted by sickness toward the close of the session. The winter has been extremely mild and open, and unhealthy as well.

The fourth and last lecture of the Zetetic course was delivered by the noted astronomer, Prof. RICHARD A. PROCTOR, of Cambridge, England, to a crowded house. The theme of the learned gentleman's discourse was "The Wonders of the Heavens." It was masterly and eloquent in a high degree. We are sorry to know that this society, which has shown such commendable enterprise in projecting the series of lectures, and such excellent judgment in the selection of orators, has lost money largely on the course. Its members may be somewhat consoled by the thought that they have the good will of the entire community. We owe to them the opportunity we have enjoyed of hearing the eminent Arctic explorer, Dr. J. I. HAYES, relate his interesting story of travel and adventure in the region of eternal snow; of hearing the distinguished poet, scholar, and traveler, BAYARD TAYLOR,

discourse upon the customs and civilization of Ancient Egypt; and, lastly, of hearing one of the most celebrated scientists and astronomers of England present his theory of the *birth, growth and death* of worlds, and throw over it all "the light that never was on land or sea."

The legislative appropriation for grading and fencing was insufficient, while nothing was given us for beautifying the premises. Therefore the teachers and pupils have decided to appropriate some money and a day for such object. On the 7th the whole school, armed with spades and axes, mattocks and grubbing hoes, will, if the weather favors, unite in planting trees, shrubs, and flowers in the campus. Citizens of Carbondale will contribute evergreens, &c., for this purpose.

We are gratified to observe the increasing influence of our Normal. Institutes will be held in our county during the spring term, and the voice of the pedagogue will be heard in the land. Some persons have made the discovery that it is a good thing to have the reputation of a good teacher, but they want the *evidence* without being compelled to learn such small things as spelling, writing, and reading, as they would be if they attended a Normal school, hence institutes, which will introduce them at once to the "ologies," are demanded. Our county is henceforth to go *forward*, not *backward*.

The third term began on Monday, the 27th of March, and brought with it many familiar faces. We give such a cordial welcome. The registration at the present writing, March 5th, is near 250. A much larger proportion of our pupils are State beneficiaries than heretofore, and intend to make teaching their life work. We are sure, from present indications, that we are entering upon our most successful term as yet in our history. Commencement will occur on the 15th of June. The graduating class will number three. Two of these, namely, MARY WRIGHT and GEORGE C. ROSS, have been students of the State Normal.

The entertainment in the Normal in aid of the Centennial fund was well attended, and well received, albeit the programme was rather lengthy. Prof. D. B. PARKINSON gave a series of interesting chemical and philosophical experiments, the proceeds of which went to the State fund. He was greeted by a large audience, and the wonder of the small boys knew no bounds. The electric machines obstinately refused to work according to the programme, which was a disappointment, alike to audience and lecturer.

The public schools of this place closed a successful six months' session on the 21st of March. The labors of Prof. Ross and his assistants have been favorably commented on by the local press.

BOOK TABLE.

Guyot's New Intermediate Geography. New York: SCRIBNER, ARMSTRONG & Co. Large Quarto, with Maps; pp. 108.

This is a new book, made on the same general plan as the old Intermediate Geography by the same author. It is more full, than the old book, and is designed "to furnish, in a single course, all the geographical knowledge which the great body of the pupils in the intermediate grades of our city schools, and common schools throughout the country, need, or have the opportunity to acquire."

The first 13 pp. of the book are given to general studies, definitions, explanations, etc. The next 44 pp. are occupied by the studies of N. America, of which no less than 30 pp. are devoted to the United States. The book is well furnished with Statistical Tables, Pronouncing Vocabulary, Review Questions, etc.

The general make-up of this book exhibits most of the peculiarities of GUYOT's system, somewhat blended with those features that have been common to school geographies for a long time. The general style of the maps is the same as those first introduced by GUYOT, the physical features of the countries being shown by a system of coloring. The book also contains GUYOT's system of map-drawing. The descriptive part of the book also retains the features of grouping and arrange-

ment for which GUYOT's books have been so long and favorably known. Marginal questions are found, for the convenience of such as need to use them.

We judge from a somewhat careful examination of the book, that it is well calculated to accomplish its purpose, and that this book, with the author's elementary, forms a series quite extensive enough for the purposes of the common district school.

Lessons in Language. An Introduction to the study of English Grammar. By HIRAM HADLEY. Part 1. 108 pp.

For some years past, the growing sentiment among thoughtful teachers has been that a radical change should be made in the method of teaching grammar in our common schools,—that we have been attempting too much of theory, and have foisted generalizations upon the pupil at the wrong time. Until within a few years, school children have received but slight training towards the correct expression of thought. True, PARKER's "Progressive Exercises" in English Composition, published more than forty years ago, and so a pioneer in the new field, gave valuable hints in this direction. This hand-book, however, was intended for advanced pupils: it was a "Sequel to English Grammar," and the author assumed that many technicalities of this dry branch had been mastered before taking up the "Exercises." As one of the earliest publications that proposed methodical school exercises for the purpose of securing the habit of correct expression, the little volume marks a noteworthy point in the progress of our American schools. Kindred publications have followed, some of them including a full exposition of rhetoric, at least so far as to meet the requirements of the average high school.

For younger pupils in language little or nothing seems to have been attempted in a practical way until a recent date. Failure to systematize the department of practical grammar has been charged as one of the most serious short-comings of the object lesson method as applied by numbers of its enthusiastic advocates. In 1871, Mr. HADLEY published his *Language Lessons*, in which he gave prominence to this feature, and adapted the work to children. It is gratifying to know that the excellence of his labor has been acknowledged, and that the well-worn stereotype plates must now be renewed. The author seizes the opportunity to recast the work, adding some new features which strike us as valuable. Among these are "illustrations selected or prepared to carry out a definite purpose—to teach children by observation, some of the most distinguishing facts of Natural History." The subjects presented seem well chosen; and, so judiciously has the author adapted his own language to the child's apprehension, that a discreet teacher, in using "*Lessons in Language*" (which, by the way, is intended for the hands of the pupils themselves), will rarely deem it necessary to allow the omission of a lesson or even a paragraph, on account of its dullness or its difficulty. Simply teach correct expression in place of incorrect: give the *reasons* by and by.

Those who have not seen "*Language Lessons*" should perhaps be told Mr. HADLEY's theory: Youths will soon acquire the *science* of language when once they are trained to *use* language. We wish the children throughout the State, in the poorest schools as well as the best, could have a chance to test the value of this view. Who fears that even ignorant teachers will do worse, working by natural methods, than in thousands of instances, they are now doing with the dry, formal technicalities of the modern Lindley Murrays? To all teachers who have come to their work with an eager desire for the best methods, and an appetite for wise suggestion, we heartily commend this little hand-book, intended for pupils who are fitly reading in any standard Third Book. M.

PERSONAL.

J. DAVIS WILDER has moved his place of business to 260 West Randolph street, Chicago. He has dissolved partnership with Mr. Osgood. We believe Mr. WILDER is the best maker, or repairer, of black-boards, in America.

H. C. COX, of Farmington, becomes a teacher in Knox College next year.

W. C. GRIFFITH, of Taylorville, will retire from the ranks this year.

O. M. CRARY has been engaged for next year at Lyndon. This is his seventh election to the same position. The Lyndon folks are wise.

GEORGE C. ROSS has resigned the superintendency of Franklin county. He is succeeded by JOHN W. ROSS, his brother. Mr. Ross is a successful teacher, and is well fitted for the duties of his important office.

J. WOODSIDES remains at Benton next year.

L. T. REGAN, of Amboy, has been lecturing to the people of his town. The local papers speak highly of his effort.

PERIODICALS.

LIPPINCOTT'S Magazine has six articles in the May number, that will be found interesting to teachers. They are: The Century—its Fruits and its Festival; Glimpses of Constantinople; Berlin and Vienna; Translations from Heine; Letters from South Africa; The Life of George Ticknor.

\$4.00 a year, or LIPPINCOTT'S and the SCHOOLMASTER for \$4.00.

The *Atlantic* comes to hand as rich and fresh as usual. Mr. HOWELLS' story reaches a somewhat abrupt conclusion. CHARLES HALL tells of The KHEDIVE and His Court. T. B. ALDRICH describes A visit to a certain Old Gentleman. One of the most entertaining articles is The Madness of GEORGE III. The usual reviews and discussions of Music, Art and Education, are found.

We have received numbers five and eight inclusive, of ZELL'S Popular Encyclopedia and Universal Dictionary. Number five has a superb map of Palestine, and the numbers are all numerously illustrated. The text is very full and comprehensive. The work is issuing in monthly parts, four each month, sixty-four in all, and is furnished at fifty cents a number. An opportunity is thus afforded to secure an encyclopedia by a small outlay of money each month. It is warmly recommended by many of the foremost scholars of the time. The agent is J. W. MARSH, 720 N. 4th street, St. Louis,

BUSINESS ITEMS.

THE LOUISVILLE WEEKLY COURIER-JOURNAL, the great national family newspaper, combines the experience, ability and material resources of three old-time Louisville newspapers of national repute—the Louisville *Courier*, Louisville *Journal* and Louisville *Democrat*—and is fortified in the respect and confidence resulting from nearly half a century of their individual and combined success. The *Weekly Courier-Journal* is not a mere hasty hotch-potch thrown together from the daily edition, but a complete, able, spicy family newspaper, carefully and intelligently edited in every column and paragraph.

Choice from 225 standard books, or any one of the leading magazines or illustrated periodicals for a mere pittance in addition to the price of the *Courier-Journal* alone.

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Terms, \$2.00 a year, postage paid. Liberal offers to clubs of five or more. Specimen copy and descriptive circular free to any address. Address

W. N. HALDEMAN,

Pres. Courier-Journal Co., Louisville, Ky.

We will send THE SCHOOLMASTER and *Courier-Journal* for \$2.40.

If you want a good ink for school use, one that will not corrode the pen, get thick, nor be injured by freezing, use MAXWELL'S Violet Ink, put up in five-gallon cans; price, \$6.25 per can. Any thing in the book and stationery line will be supplied to teachers at a reduced price. We make a specialty of filling all orders intrusted to us. If not in stock, we will procure and forward as soon as possible. If you want catalogues write us. If you are in want of a rare book that you have been trying without success to procure, try us. BANCROFT'S History of the United States, Centennial edition is to be complete in six volumes; volume third is now ready; price, \$2.25 per volume.

MAXWELL & Co., Bloomington, Illinois.

ILLINOIS TEACHER,
Volume XXII.

THE

CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

JUNE, 1876.

NUMBER 97.

GRAMMAR.

In a list of questions prepared for an examination of teachers in this county, I placed the following in grammar: "Explain the verb-form 'have written' as it occurs in the sentence 'I have written a book;' viz: name its tense and tell why you so name it, tell what the auxiliary does for the form, and with what it is used, what 'written' is used to indicate, and what the combination of the two words expresses." Forty-two persons, some of them holding first-grade certificates, and most of them considerably above the average candidate for examination, were examined upon this question. Out of the entire class but two gave answers that were clear and to the point, and showed a thorough understanding of the matter.

This fact led me to think that "something is rotten in the State" of Illinois in the line of grammar teaching and grammar studying, and that the matter, like "Josh Billings's" "Rockaway clams" "will bear looking into." The great trouble with the ordinary work in grammar is a lack of definiteness. The science of language is not considered an exact one. You can never filter a batch of words and determine the exact value of the residuum. Even the edicts of law, or the eternal principles of theology, when formulated in words, find a hundred different interpretations among as many men. Hence the study of language becomes the most indefinite of the course. And this, I take it, is why the study is so unpopular among both teachers and pupils. Mathematics and the Natural Sciences are exact throughout. Definite results can be arrived at, if correct methods are used. But words are so slippery, you can never tell exactly how or where they are going to turn up; they mean so many different things and can be taken in so many different ways, that one gets discouraged in trying to corner them. And so I have sometimes thought that the ordinary work in grammar results in fully as much harm as good. The indefiniteness of language, and the double indefiniteness

of the science of language, generate most pernicious habits on the part of the pupil—habits of doing inaccurate and dishonest work in the place of that which is exact and honest. All this is wrong. The science of language should stand as the crowning glory of all science, and its study should be productive of good, and good only. And first, all definitions in grammar should be exact, and expressed in such language that their meaning will be clear to the mind of the pupil. This is not now the case. Take for example the ordinary definition of a verb, "A verb is a word that expresses being, action, or state." The word "express" as used here means, "to give an idea of," or "to make one think of." A child learns this definition and starts out to apply it. Suppose the first word he sees that "makes him think of action" to be "running" as it occurs in the expression, "a running horse." He immediately says, "Running is a verb, because it makes me think of action!" He is taken down by the teacher, who says, "Oh no, running is a participle;" or, he learns the definition of a noun, that it is "the name of any person, place or thing," only to be told that "yesterday" is an adverb, and so on, until he gets discouraged and thinks it is all guess-work any how, and then goes to guessing. Definitions should be exact. They should truly *define* the terms they attempt to put into bounds. They should take in neither too much nor too little, but just enough. Again, great care should be taken to impress upon the mind of the pupil the idea that words vary their *forms* to vary their signification. Ask the average pupil or teacher what he means by the "form" of a word, and he will not be able to tell you. That it is simply the *spelling* of the word, has never entered his head, and that words vary their spelling to vary their signification is an idea that few grammars or grammar teachers lead the pupil to realize. The evil result of this indefiniteness manifests itself by the bungling work that most persons who have studied only English Grammar make, when they attempt the study of some foreign or classical language. This idea that lies at the foundation of these languages, is scarcely touched by the average student of English Grammar. Yet we have the matter clearly and accurately illustrated in several classes of English words, as "A personal pronoun is one that by its *form* indicates its person." This matter of form of words should be thoroughly inculcated in the teaching of grammar.

Nowhere is this more clearly and definitely shown than in the verb-forms. These are made up not only by the varied spelling of individual words, but also by combining two or more words to make the form. Each word in a verb-form has a special duty to perform; it is used for a definite purpose, and the form takes its name from the various ideas expressed by

these words. For instance, the form "Have written" is given a name which is derived from the two words that compose the form. This idea should also be made prominent. The average grammar gives the following definition of tense: "Tense means time, and the tense of the verb indicates the time of the action." This is true, but it is only a part of the truth. The form "have written" is commonly called present perfect. Part of this name refers to time, but another part brings in another idea, namely, that of condition. Tense, as used in grammar, means more than time, as the naming of the various tense-forms indicates. The pupil should learn just what each of these words that go to make a tense-form is used to indicate, and from the various ideas given by the different words he should derive the name of the form. All this work is exact, and will lead to exact and definite results. The inaccuracy of the average work continues, when the pupil learns not only that "tense means time," but when in addition he learns that there are *six* tenses. Now there can be but three divisions of time. "Yesterday, to-day, and forever" include the list. Past, present and future are all the absolute divisions of time within the range of the comprehension of man. There are but three tenses then, if tense means time alone. But, as we have seen, the word tense as used not only gives an idea of time, but also of the condition, or state of an action or existence at the time referred to.

The form, "have written" fixes the time as present, and the condition of the action as complete or perfect, and hence we derive the name of the form, "present perfect." Here are two ideas, each of which is expressed by a separate word. The first we call the auxiliary, and it fixes the time of the action; the second, the participle which fixes the condition of the action. The pupil should learn that an auxiliary is used principally to fix the time of an act, and that the word with which it is used, fixes the condition of the same, and that the tense form receives its name from both the words, the part of the name meaning time from the auxiliary, and the part meaning condition from the word or words with which the auxiliary is used.

Now, an act may be considered as in one of three conditions, viz: Intended, progressive, or completed. The first of these is not commonly recognized, but usage confirms this division. We have then three divisions of time, and three conditions in which an act may be considered. To name a tense-form then, one has simply to consider the auxiliary to fix the time, and the rest of the form to determine the condition of the act. Participles and infinitives are used with auxiliaries to make tense-forms, and in these they fix the condition. Now, since this is true, it seems to me that most grammars are at fault in naming these classes of words. We read of *pres-*

ent and *past* and *future* participles and infinitives, all of which words give us ideas of time, when the fact is the words so named contain no idea of time whatever. The participle ending in *ing* gives no idea of present or any other time, in itself. By using a proper auxiliary with it, any one of the divisions of time may be indicated. Thus, in "I am writing," present time is indicated; "I was writing," past; "I shall be writing," future, etc. Then it seems to me wrong to call this participle "present," since it contains no idea of time, itself, but depends upon the auxiliary for this element. But this participle always does convey the idea of progression, and should therefore be called a *progressive* participle. The form "written" likewise has no time element in it, and should not therefore be called a *past* participle. The idea it gives is that of completion, and it should be called a *complete* or *perfect* participle. The "*future*" participle likewise should not be so named. It does not indicate future time, but *intended* action. These names are definite. They convey to the mind of the student exact ideas, and by a proper and correct study and analysis of verb-forms, a pupil will receive as definite ideas as in the pursuit of what are often termed the exact sciences. It would be easy to go on, showing how many of the silly combinations which grammarians have prepared and given high-sounding names that only mislead the pupil, can be made simple by exact analysis and definite thought. The potential mode is simply a grouping together of verb-forms, in which the auxiliaries, in addition to fixing the time, contain in common the idea of *power*. If a pupil learns the true and exact meaning of the auxiliaries, these forms will give him no trouble. In these days when the average man is so troubled to say what he means, and mean what he says, we certainly need grammar taught as an exact science.

W. H. SMITH.

TOWNSHIP ORGANIZATION.

The first difficulty, which our present system presents, is having two sets of officers—township trustees and district directors—whose duties overlap, and in some measure conflict; *e. g.*, directors raise the money and build school houses, trustees own them, while the care and control of them revert to directors, a state of things which suggests the old Saddusaic question, "Whose wife shall she be in the great resurrection?" An amusing instance of the muddle this state of things produces, even in the brain of a lawyer, occurred a few weeks ago. Our State's Attorney came to me asking the

address of the trustees of a certain school district. On my mildly hinting that there were no such officers known to the law, and inquiring what he really did want, I learned that injury had been done school property, and he wished to know in what name to prosecute for damages. I stated, as well as I could, the duties of trustees and directors. "Well," said he, "between your trustees who own, and your directors who build and control school houses, I'll be shot if I know in whose name to prosecute"

Statistical reports are another cause of irritation; trustees, through the treasurer, are held responsible for them, but the data are furnished by directors. My treasurers say not more than one set of directors on an average in a township, keep their books in good shape, and make reports promptly and accurately. On the other hand, directors complain that township officers are remiss or careless in the matter of making the enumerations on which appropriations are based. By the by, this enumeration must be by *districts*, but the duty of making it devolves upon the township officers. As Dr. BATEMAN says: "When the legal responsibility rests upon one set of officers, while the consequences of their action affect another set, it would be strange if friction did not arise."

Another cause of irritation is district boundary lines. We all know cases in which children would be much better accommodated by attending some other school than the one in their own district, either because of distance or attainments. True, permission can be gained to do so, but it is a troublesome process; school officers, being human, *sometimes*, as they have *always* the power to do, refuse such requests from motives other than a desire to secure the greatest good to the greatest number. Abolish district lines, and one prolific source of trouble would cease to exist.

Perhaps the sorest evil in our present system is the multiplicity of school officers. By actual count Knox county has 647; Illinois is estimated to have nearly 40,000. Every business man knows that work is best done when done by the fewest hands. "One boy is a boy; two boys half a boy; three boys, no boy at all," and the same is true of men. There is little room to doubt that our school affairs would be more efficiently managed by one-tenth the number of officers than they can be by this army 40,000 strong.

No other department, either of government or business, shows such complexity; common sense dictates that we simplify matters, and thus secure increased efficiency.

This multiplicity of officers necessitates a multiplicity of petty elections. By our present system 12,000 regular school elections must be held in the State annually; extra elections largely increase this number. Just think

of the time thus consumed, for each one requires one day's time from at least three persons, the clerk and two judges, and more or less time from each voter, on the very lowest estimate 60,000 days in the aggregate. Each man's time cannot be worth less than \$1.50 per day—\$90,000 to begin with. Then, there is the expense of notice, poll books, tally lists, returns, etc.

Then, in proportion to the increase of local elections, is the increase in the chances for neighborhood quarrels—no slight matter. Our County Clerk said to me on my election, "You have now got all the neighborhood fusses in the county on your hands, for they are always lugged into school matters." And it is a good deal so. Personal prejudices and differences, which would be sunk entirely out of sight in larger elections, are often brought into a district election, and turn the scale, without any reference to the highest good of the school.

On the other hand, when there is no exciting cause, these elections are neglected. Last week a director told me that lately, when the removal of a director from their district made an election necessary, three were called. The first time no one but himself came; the second, the remaining director kept him company; the third, five voters were present, and went through the motions which place a man in one of the most responsible school offices for three years. When we consider the innumerable multitude of elections our people are called upon to attend, I do not know that we can blame them for neglecting some.

The difficulties which arise from the multiplicity of school districts are so many and grievous, I dare not commence upon them lest I forget to stop. And the number of districts is increasing continually; it may increase infinitely for all the law says.

Our present plan necessitates a most complex and vexatious system of special taxation. For example, Knox county has 186 districts; 186 different rates of taxation. Is it any wonder that mistakes sometimes occur in attempting to manipulate this complex machinery? When such mistakes do occur, there are always bitter complaints against the county clerk; for my part I wonder county clerks do not make more mistakes than they do. Nobody objects to the same rate of taxation throughout the township for other purposes, why should school taxes be an exception? Are not schools just as much *public* benefits as are roads and bridges?

Could the school affairs of the township be conducted by a board in whose hands should be the duties now divided between trustees and directors in such bewildering confusion, we believe they would be much more efficiently managed, at less cost, and with less friction. We believe the grade

of our schools would be advanced, a better class of teachers would be employed, and employed more permanently, better systems of classification made possible, and a long step taken toward the establishment of township high schools. This conviction is based not upon theory, but upon facts. This is substantially the system under which our village and city schools have secured such efficiency. Chicago, with 300,000 inhabitants and 35,000 scholars in her public schools, finds no difficulty in managing her school affairs through one Board. The same is true of all large cities. It would be impossible for them to carry on their schools in any other way.

But, it is objected, the conditions of city and country district are so different, one is no criterion for the other. True, but we have abundant evidence that the township system is as well adapted to country districts as to cities. In our own State, several townships have adopted it, as can be done under existing laws, by consolidating all the districts into one. Wherever this consolidation has been effected, the results are just those predicted here. Many States have adopted it, and under it their schools have greatly increased in efficiency, with lessened expense.

Pennsylvania has brought this system to nearly practical perfection; its admirable results have there been tested and demonstrated for many years. With a million more population than we, she has 1,700 boards of directors, while we have over 12,000. Those best competent to judge, from state superintendent down, testify that the township system has secured permanency of territorial boundaries, better grading, visitation and supervision of schools, better teachers and methods of teaching, and more prompt and accurate reports.

Indiana adopted the system in 1865; the rapid strides she has made in educational matters during the last ten years attest the success of the experiment. After this topic was assigned me, I wrote to Hon. J. H. SMART, State Superintendent of Indiana, asking him how the system worked. He replies: "The schools are in charge of township trustees, who are authorized to build houses, employ teachers, and manage the schools. In each of the incorporated towns and villages we have a school board of three. This makes about 1,500 school officers for the State. The system works well—far better than the district system. It is utterly impossible to unify a school system in which you have 20,000 school officers." What could he say to 40,000?

In view of all these facts, in view of all the arguments our own experience teaches us, can we, as superintendents, aim at anything less than township school organization in every county, and a genuine high school in every township?

MARY ALLEN WEST.

CONSCIENTIOUSNESS IN ART.

Nothing seems more thoroughly to have stirred up the indignation of our old Roman friend, HORACE, than the actions of one who did not recognize the respect and honor due to poetry. Nowhere does he warm to his task so vigorously as when he is expressing his very candid and forcible opinion of the man who shall dare to write verses unless he has a divine call so to do, or one who, even having the former, is not willing to give to the work, first, careful preparation, and second, faithful and conscientious labor. He indignantly exclaims that even the man who cannot throw the discus nor toss the ball well, has sense enough to hold himself away from the public games, and not to make himself an object of ridicule to the gaping crowd, and yet that he who knows nothing about poetry dares to fashion verses. Again, he breaks forth in the same indignation only a few lines farther on. The race-runner, he says, is willing to undergo all hardships, and to subject himself to all most difficult renunciation, in order fitly to train himself for the power which shall give him the victory; and he adds that if any one would sing worthily, he also must be willing patiently to learn.

In the indignant word "dare" of the first sarcasm, we recognize at once the reverence which the true artist, in whatever line, feels for his art; in the thought of the second passage, the willingness, as a result of the reverence, to be an apprentice to it. To any true artist, the careless touch of him who is not inspired with reverence is, and must be, taken as an insult to that which he worships, and for which, in his intense appreciation of its truth, he is willing to sacrifice himself,

"To scorn delights, and live laborious days;"

and, as JACOB willingly and joyfully served fourteen years for the woman who was to him the embodiment of all that was fair and good, so is the true artist in whatever work, not only willing but desirous to serve out a long and wearisome apprenticeship, so that at length he may feel himself to have earned his title of master-workman.

Wherever we find real and conscientious artistic work, there we find also these two characteristics of the artist toward it: a chivalrous devotion, born of a deep reverence, and a humility which even demands servitude as the price of freedom.

No one could have expressed this feeling more strongly than Charlotte Cushman. "Tell her," she said to me once, in speaking of a friend who desired to go on the stage: "tell her from me, that if she is going to try that work simply because she can think of nothing else that she can do, she had

better never go, and she will never succeed. If she is going because it is the one thing of all others that she desires to do, and that she will do with all her soul, she may try." "Tell her also" she added "that the way to success there is not easy. It was hard enough when I was young, and it is still harder now." In her words I recognized the artist. I think, from what I knew of Charlotte Cushman, that the report which has gone abroad of her deterring young women from entering the theatrical life, is inferred from her expression of such sentiments as these. It was no wonder that she deterred them, for nine out of every ten who appealed to her womanly sympathy, at the same time aroused her artist's indignation.

In the same way, I suppose, we shall many of us be reported to have deterred young women from the attempt to teach, for the true teacher will have recognized in Charlotte Cushman's words the unmistakable pass-word and grip of a fellow-artist. It has been one of the platitudes of our educational text-books, ever since Horace Mann's days, that though the carpenter and the mason needed an apprenticeship, any one was supposed to be able to teach, and that, too, without any preparation. Our cities and towns are flooded with teachers of foreign languages, who have no other qualification for their proposed work than the undoubted fact that they were born in a foreign country. This is bad enough to bear, but what shall we say to the women who come to us to ask for professional help, for a chance to teach, with an apology on their tongues at every sentence for thus demeaning themselves? What shall we say to those who, having never taught, and of course having "never expected to be obliged to teach," want us to tell them some place where they will get "\$1,200 a year and expenses paid," and will not consider any place at a smaller remuneration? What we wish to say to them is this: "How do you dare (we are quoting Horace's word) to come to me, who am a teacher, and ask my aid and advice, while at the same time you insist upon apologizing for stooping so low from your superior position as to accept the work of teaching? How do you venture so to insult, not me, but the divine art whose humblest servant I am?" This is what we would like to say: what we do say may have somewhat of the same savor. What we do add is, that there are plenty of sadly vacant places in the positions which command "\$1,200 a year and expenses paid," but that such places must be won by not merely patient, but conscientious toil for years in an apprenticeship. What we have said often is this: that the teacher who is not willing, so long as she is an apprentice, to work with her whole soul for \$300, will never reach \$1,200. I care not if she understands two languages, or can calculate eclipses, or knows all the lists of all the kings and all the emperors from Confucius down. She may even have all the knowledge attainable, but

without a reverence for the art of education all her acquirements will be the broken pieces which she may hold in her hand while the "*geistiges band*" is lacking. We do sadly need in many cases the reverence of the true artist for his work. We do sadly need teachers who are artists and not artisans.

Let us for a moment imagine Phidias as pausing in his work on the Otricoli Jupiter to follow a visitor to the door of his studio and explain, with much verbiage, the sad circumstances which had reduced him to cut stone for a living, and we shall begin to see how absurd is the position of any teacher who insists upon apologizing for her position. And fortunately the art of education is so much of an art that it must be humbly studied in detail from one grade to another and year after year, before one can begin to feel the sense of power—the same thrilling sense of creative power which the actress, the orator, feel when they sway thousands of human hearts by the magic of their tones.

A reverent appreciation for the art as such, and the humble, patient devotion of a disciple at its feet: these are always and everywhere indispensable for the educator.—*N. E. Journal of Ed.*

SHORT SERMONS FROM FAMILIAR TEXTS.—I.

"PONDER THE PATH OF THY FEET."—*Prov. 4, 26*

At this time, when teachers are so anxious to get the greatest amount of work done in the shortest possible time, while it seems to be felt that quantity is of more worth than quality, while "What do you know?" seems of less moment than "What have you studied?" a consideration of the above text, it seems to me, is very pertinent.

In the great rush to be the first to answer the teacher's questions, pupils are led to talk absurdities, and form the habit of random thought. They conceive the idea that it is better to be prompt and wrong, than slow and right. Such expressions from the teacher, as, "Let me hear you say something," "I would rather have you answer wrongly than remain silent," help to rivet this thought.

Not long since, I asked a class of little fellows who were wrestling with Aliquot Parts, among other things, this: "What part of eight is four?" There was a burst of noise, and amid the confusion I heard, "Eight is twice four," "Eight is one-half of four," "Four is one-half of eight." The greater part of the class spoke without thought, and either failed to tell the truth at all, or failed to tell the truth required. I quoted the text to them,

and made it a matter of special request that they should confess their ignorance when a question should be asked, the answer to which they did not know.

Dr. HOLLAND quite truthfully says that it is a very difficult thing for one to tell the truth. People desire to be truthful, no doubt, but it is hard to comprehend a truth in its entirety, and harder to choose language with which to express it.

Would it not be well to insist upon care in statement, rather than rashness; to commend for accuracy, rather than for promptness; to teach that one *truth* is better than a score of *half-truths*? In short, would it not be well for us, as we step before our pupils and they march before us at our bidding, to bid them heed what they say; and while we decorate our walls with, "Nothing is impossible to him that wills," "Time trips for triflers, but flies for the faithful," "The reward of the faithful is certain," and such mottoes, to put behind the teacher's desk, to be seen by every pupil as he recites, "Ponder the path of thy feet?"

C.

A PROPOSED SCALE OF LINEAR, SURFACE AND CUBIC MEASURES.

In offering a thing of this kind to the world, I am not ignorant that a better one exists in the French system, but it is not easily adapted to our use.

1st. In the matter of land measurements, it does not, in any unit of its scale, equal any unit of ours, nor any integral number of ours. We may not say that three times any one of their units equals five of ours.

2d. We have by far the larger part of our land surveys already settled upon a plan giving easy descriptions in the transfer of estates, the unit of which is the section, or the square of the statute mile.

If we take the statute mile and divide it into 1,000 equal parts, and give that the name yard, and let it be the unit or base of the system, dividing it into tenths and hundredths for feet and inches, we shall have the following table of linear measure:

The inch written, .01,	10 inches equals 1 foot	equals	.10
10 feet	" 1 yard	"	1.00
10 yards	" 1 rod	"	10.00
10 rods	" 1 furlong	"	100.00
10 furlongs	" 1 mile	"	1000.00

SURFACE MEASURE.

100 sq. in. make one sq ft.	equals	.01
100 " ft. " " sq yd.	"	1.

100 sq. yds.	make one sq rd.	equals	100.
100 " rds.	" " "	acre	10,000.
100 acres	" " "	section	1,000,000.
CUBIC MEASURES.			
1,000 cubic in.	equal	1 cubic ft.	equals .001
1,000 " ft.	" " "	1 " yd.	" 1.
1,000 " yd.	" " "	1 cord	" 1,000.

These tables of units would be of great service to that class of workmen who have to deal with measurements that are given in yards, feet and inches, and their own estimates have to be made out in yards or in feet, since in the multiplying of dimensions together, they come directly to the required result without reductions. And the table greatly simplifies the estimating of larger areas by avoiding fractional grades. The pointing is that of our decimal system. As the grade or step from units of one class to those of another in linear measure is ten, in surface measure two places must be allowed for each order of units, as the grade is 10×10 or 100, and in cubic measure three places must be allowed, as the grade is $10 \times 10 \times 10$, or 1,000. The same system guides the pointing of the fractional portion of the work, for tenths multiplied by tenths give hundredths, and multiplied by tenths again give thousandths.

The various uses of units of volume make it almost impossible to arrange any table that will serve them all, but the above will prove useful to those working in lumber and mason's work, and the estimates for excavations.

Rule for reducing measurements of the old scale to this one: Linear measure. Reduce to yards and the decimals of a yard, and divide by 1.76, and answer will be in yards, or decimals of a yard, of the new measure. For surface measure, you follow the same direction, and divide by 3.1076. For cubic measure, the same rule and divide by 5.469376. These are respectively the squares and cubes of 1.76. To reduce the other way, multiply by these numbers.

CHEAP SCHOOLS.

Some of our towns and school-boards are pursuing a novel method of investigation into school finances, which would be commendable on account of the ends sought, were it not patent to the observer that the results are deceiving the people, and, like all deceptions, will re-act upon those who, either from ignorance or design, seek to build upon false premises a financial scheme for supporting common schools. The pressure from the people for economy, reduction of taxes, and the introduction of financial reform, *i. e.*, less public expenditure, is a legitimate one, conceived in honesty, and it is the lawful and proper outcome of years of extravagance developed by the

war. "Everything is cheaper." Of all American institutions the public school is nearest to the people. City governments are elected yearly and are changed in form and opinion as the people direct at the ballot box ; and yet the voters who have a well-grounded opinion as to how the city's public affairs should be managed are less in number than those who are, or who think they are, well informed in matters pertaining to the administration of public schools. Hence it is that school boards are very near the people, and are first among public corporations to feel the command from their constituency to reduce expenses.

With this object in view, circulars have been prepared containing a series of questions, which are mailed to neighboring school boards in Illinois and adjoining states ; to these questions answers are sought. Here are some of the questions. How much do you pay teachers? How much do you pay janitors? What is the assessed valuation of your district? What school tax is levied? How much *per capita* do your schools cost?

Here are a few sensible and well put queries, proper to be asked, and important to all to be correctly answered. So far, all is good. The evil use to which these gathered statistics are put is that people are asked to hurrah, and newspapers asked to help hurrah, for that city that can show the fewest cents *per capita* expended for public schools.

A great railroad corporation reports to its stock-holders at the close of a year that hundreds of miles of new rails have been bought and laid during the year at a price fifty per cent. less than a neighboring railroad company paid. Do the stockholders cheer at this piece of financiering, or do they first ask about the quality of the iron as compared with that of the neighboring road?

A prominent and influential newspaper in Illinois recently contained an article boasting over the success of the schools of its city, *because* as compared with other cities of its size, the *per capita* of school expenditures was much less. The editor would hardly venture to place any other enterprise of his city on such a basis. It is sometimes said that a teacher is a teacher, old or young, black or white, man or woman, and is worth just about so much money per month ; but nobody believes this, and nobody can be taught to act in accordance. The great difficulty lies of course in the impossibility of weighing the labor of the teachers—in determining where the good and efficient schools are, but the people will tell this, they will learn the truth ; and only those school systems can be permanent and prosperous, that are truly efficient. It takes time, but in the end the people of the west can be depended upon just as surely as those of New England. A superintendent of one of the eastern cities, upon being asked how much it cost his people to educate the children, replied that the sum was very large, but that the am-

bition of the community was to make it twice as large. The merchant whose annual sales justify purchases of \$10,000 per year, works day and night for the time to come when he can prudently buy \$20,000 a year.

It is not expenditures at which we must look, but to the relation existing between the expenditures and the returns.

Let the income exceed the outlay; let us cease glorifying over small school bills—make them as large as possible, but be sure that proper returns are forthcoming. Skilled workmen and women can bring returns. Let school boards look to relative and not to absolute expenses, and the people will approve.

AARON GOVE.

HYMN.

Written for the opening of the International Exhibition
at Philadelphia, May 10th. 1876.

OUR fathers' God! from out whose hand
The centuries fall like grains of sand,
We meet to-day, united, free,
And loyal to our land and Thee,
To thank Thee for the era done,
And trust Thee for the opening one.

Here, where of old, by Thy design,
The fathers spake that word of Thine
Whose echo is the glad refrain
Of rended bolt and falling chain,
To grace our festal time, from all
The zones of earth our guests we call.

Be with us while the new world greets
The Old World thronging all its streets,
Unveiling all the triumphs won
By art or toil beneath the sun;
And unto common good ordain
This rivalry of hand and brain.

Thou, who hast here in concord furled
The war flags of a gathered world,
Beneath our western skies fulfill
The Orient's mission of good-will,
And, freighted with Love's Golden Fleece,
Send back its Argonauts of peace.

For art and labor met in truce,
For beauty made the bride of use,
We thank Thee; but, withal, we crave
The austere virtues strong to save,
The honor proof to place or gold,
The manhood never bought nor sold.

Oh make Thou us, through centuries long,
In peace secure, in justice strong;
Around our gift of freedom draw
The safeguards of Thy righteous law;
And, cast in some diviner mold,
Let the new cycle shame the old.

—JOHN G. WHITTIER in *June Atlantic*.

THE BEGINNING POINT IN ZOOLOGY.

The beginning point, a matter of indifference in no subject of study, becomes one of the first importance when the subject is especially complex. There is no mazen or chaos more bewildering than a thoroughly organized science approached from the wrong side; and no simplicity more beautiful than the perfect order in which all sense of intricacy is lost when one has the secret of the proper point of view.

The myriads of animals and the utterly inconceivable multitude of their mutual relations, their infinite varieties of form, and diversities of structure, their prolix and varied histories, difficult in even the simplest, involved as the annals of an empire in some of the highest; the problems of distribution of origin, of purpose, the endless detail of fact, and the tremendous sweep of generalization, embraced in the science of zoology, may well perplex and confuse the most skillful teacher as he approaches the subject with a class of average pupils. Slowly, as he ponders a beginning, he mentally revolves his stock of general principles. Begin with the simple, and proceed to the complex. Begin with the known; and proceed to the unknown. Pass from the concrete to the abstract. A general view should precede a study of details. First the type, and then its modifications. Begin at the logical center, and work outward to the necessary results. Begin with those parts of the subject which call into action the lower faculties, and end with those which exercise the higher, etc., etc.

He is not long in discovering that many of these propositions seem mutually destructive. The *smallest* animals are the *simplest*, but to most of his pupils these are totally *unknown*. Simpler than any animal is the chemical element which enters into its composition; but it would be preposterous to begin zoology by an exhibition of *gases* in a chemical laboratory.

If, applying the fourth principle mentioned, he meditate definitions of the spiritual and the material, of matter, animate and inanimate, organized and unorganized, of plant and animal, of the word zoology—notwithstanding the destruction caused by the flood, teachers of this habit still survive—he only finds the conflict thickening. He is beginning neither with the simple nor with the known, nor with the concrete, nor with the type, nor at the logical center, nor at the psychological base.

Perhaps, diverted by the somewhat shallow philosophy of education which takes no note of the *educated*, he is tempted to take the typical animal of some leading group as his starting point, or even an *ideal* type, — but this hardly lessens his embarrassment, and his patience begins to feel the strain.

Let us here pause to breathe a fervent hope that he will not make the final confession of subservient helplessness, and determine to begin "at the beginning of the book."

The maker of the text-book may be a very learned scientist, and a profound philosopher, but, then, possibly he may not; and, if he is, he may be more ignorant than the average teacher, of the mental needs and conditions of the child. These are, in themselves, a subject of special study: they are the *teacher's specialty*, and he should take no dictation in this field from those whose work has been done quite elsewhere. The scientist is very apt to esteem his science first, and to endeavor to force the mind of the child into conformity with the logical relation of his facts as they appear to him. The elements of the feast shall be arranged and served in the order of their rank as chemical compounds, and if the guest do not like them thus, then cultivate his taste. The *teacher* must see that the science is bent to the mind of the pupil; that the food is presented as the laws of the organization require.

Let us analyze this conflict further, and see if order cannot be discerned. There is current a classification of studies, as studies for guidance, and studies for culture. Apparently because a knowledge of the laws of health and of some of the general laws of nature is useful to us, all the natural sciences are commonly thrown together into the latter of these divisions. But what is true of physiology, and partly true of physics and chemistry, is not true at all of botany and zoology. The value of these facts to the ordinary pupil lies almost wholly in the manner of their acquisition. A failure to appreciate this point is fatal to a comprehension either of the real claims of these studies upon the schools, or of the true methods of instruction. The common plan of "oral instruction" in these branches seems to have been constructed with truly malevolent skill to deprive them of nearly all possible value. The facts acquired are of but the slightest use, and the mental discipline is almost *nihil*. The chief value of zoology is that it affords perhaps the best possible means for the thorough and comprehensive culture of those powers upon whose use mainly depends our success in whatever calling in life we may pursue; the power to observe accurately and exhaustively; the power to tell the exact truth with clearness, brevity and point; the power to compare, to generalize, to perceive numerous and remote relations; the power to remember the things we see and hear; to classify and condense the items of our knowledge; to hold in mind and handle readily large groups of facts at once; the habit of questioning, of investigation, of independent thought, of exactness, of caution, of bringing everything to the test; the experimental knowledge of how exceedingly difficult a thing is to

learn, and tell the naked truth about even very simple matters. No one can deny that all these are of the utmost practical importance to all alike; and no work nor study which can be made to serve for their development and cultivation should be assigned a secondary place. There are no studies more intensely "practical" than these, which are generally made the ornaments of a "liberal education." We will lay down, then, the cardinal principle that the study of zoology should be begun and continued so as to result in the utmost possible training to the student.

Here, then, there is no need of that unscrupulous haste which is the bane of our schools. There is not the slightest excuse for cramming. Fortunately, neither the life, nor health, nor usefulness, neither the temporal success, nor eternal welfare of the child, depends in any considerable degree, upon the number of facts concerning animals to which we give him a legal title in a given number of months. For once we need not attempt to rival the feat of Ariel in putting a girdle about the earth in forty minutes. We may tramp the very longest way to our journey's end, indifferent whether we ever reach it, provided we bring back our pupils brown and ruddy and strong, with clearer eyes and quicker pulses. In fact our journey has no end. It is all by the way. We may take the study of nature as the naturalist takes nature herself,—not in the dusty wagon-road, much less in the palace car—but on foot and across the fields. We will not even use a bridge, when we can find a foot-log. In short, we may experience the precious luxury of doing at least one piece of genuine, simple work, thinking only of the "how well?" and never of the "how much?"

The training we arrive at is, of course, to be acquired by the practice of those operations which the mind performs upon things, or upon ideas derived from things; and we must take the lowest and simplest of these first. There are perhaps none who will deny in theory that we should begin a study with those elements which are simplest to the pupil's mind.

SPENCER lays down, as the first of his guiding principles in education, the proposition, that "we should proceed from the simple to the complex," because "like all things which grow, the mind progresses from the homogeneous to the heterogeneous," and we should begin where the mind begins. But if the general were more easily conceived, understood and remembered than the particular, we should evidently begin with the former. In fact we ought always to begin at the *easiest* point, the point attained by the pupil with the least mental effort.

Now the simplest and easiest mental act is an act of observation; but what may we best observe? What is the objective element in zoology

most readily conceived by the child,—the one therefore to *him* the simplest? Evidently it is not the chemical constituent, the cell, the tissue or the organ. These, if thought of at all, are thought of as *parts* of a *previously imagined whole*. Certainly it is not the type—as such,—either ideal or material, nor the group, nor the general definition, for these are the results of vast generalizations which he has as yet the means neither to make, nor to realize, nor to verify. That the concrete thing is simpler than the abstract idea, that the single animal is simpler than the complex group, that “dog” represents a simpler notion than “vertebrate,” one would suppose to be self-evident, if it were not that so many have by their practice evinced the opposite belief. “General formulas,” says HERBERT SPENCER, “which men have devised to express groups of details, and which have severally simplified their conceptions by uniting many facts into one fact, they have supposed must simplify the conceptions of a child also; quite forgetting that a generalization is simple only in comparison with the whole mass of truths it comprehends—that it is more complex than any one of these truths taken singly—that only after many of these single truths have been acquired does the generalization ease the memory and help the reason; and that to the child, not possessing these single truths, it is necessarily a mystery. Thus, confounding two kinds of simplification, teachers have constantly erred by setting out with ‘first principles.’” The teacher who has not the habit of putting himself in the child’s place—an extremely difficult but positively essential feat—will blunder in this way again and again.

The zoological element that most readily occurs to the uninstructed mind is, undoubtedly, the single familiar animal. Unfortunately, we may not begin where we should prefer, with some of the *simplest* forms of life, for nature has taken this matter out of our hands by making the complex animals the larger, and therefore the more familiar. A familiar thing, however, is always “easier” than an unknown one much less complex; and, at any rate, the difficulties offered to external study of even the bird or mammal are not too great for the smallest child. With internal structure, we can have nothing to do at first, without an almost complete “solution of continuity” in the line of development.

Begin, then, by reviewing, arranging and multiplying the observations of the pupil, upon already familiar animals, considered singly. Here he is at home and at his ease, his faculties alert and clear. He is not stunned with learned words of vast, indefinite meaning, nor bewildered by utterly unfamiliar facts whose luminous, logical relations are as the blackness of darkness to him. Nor is he forced to go mechanically through the motions

of quenching an imaginary thirst from the empty bottle of an incomprehensible definition. He stands with eager feet upon the borders of his play ground, looking at the hills beyond whose summits he has often longed to go. It will not lessen the pleasure or the profit of his journeys of discovery that he does not yet know the boundaries of his State nor the area of his native land. The *teacher* must carry the map of the country in his hand, but the *boy* must be left to think only of what he sees. It is enough for him that the world is wide and that there need be no end to his roaming.

S. A. FORBES.

OFFICIAL.

EDITOR SCHOOLMASTER :—The County Superintendent of Schools of Whiteside county requests an official answer to the following questions, through THE SCHOOLMASTER.

1. "Is it legal to continue teaching *after a certificate expires?*"
2. "What can be done to prevent teachers beginning school without a certificate, and teaching until circumstances favor the effort to get one?"

The answer to the first question may be made plain by stating that a certificate is a license to teach school. They are of two kinds. Those of the first grade are specifically stated in the law, Sec. 50, to be good for two years, and those of the second grade for one year. The same section provides that "No teacher shall be authorized to teach a common school under the provisions of this act *who does not possess a certificate.*" A teacher who has a first-grade certificate can teach under it during the two years for which it is given, and not a day longer. For when the two years have expired, he does not possess a certificate. The same is true of a second-grade certificate. It expires at the end of one year from its date, and no authority is given in the law to any one to extend it.

To the second question, a complete remedy is found in Sec. 52 of the act, in these words : "No teacher shall be entitled to any portion of the common-school or township fund, or other public fund, * * * * who shall not * * * * have a certificate," &c. The township treasurers should refuse to pay any order drawn for a teacher's wages for any time not covered by his certificate. The payment of any public fund for such time is against the plain provision of Sec. 52, and should not be allowed in any case, nor any circumstances. Any person in the community may advise the treasurer that the person teaching is doing so without a certificate, and

may prevent payment of illegal orders by holding the treasurer responsible for neglect of duty, under the provision in Sec 76. Were this section enforced in the way indicated, by the treasurers, these persons would soon cease any such unlawful attempts to simulate teachers, and county superintendents and the community would be relieved from much annoyance and many unpleasant complications.

Respectfully,

S. M. ETTER, Supt. Pub. Inst.

EDITORS' DEPARTMENT.

We present in this number an article from Superintendent GOVE, of Denver, upon a topic that the average "Board" is supposed to be struggling with about this season of the year. Economy is the watchword now-a-days. But, as is pointedly stated by Mr. GOVE, economy does not necessarily imply the smallest expenditure of money. We once heard of a parsimonious brother who had served the Lord twenty-two years, at a net expense of seventeen dollars. Few would care to take his assets at cost. It is the manifest duty of those who expend the people's money to make every dollar bring its full value. A reckless expenditure of public funds is a betrayal of trust. But it is not economy, it is foolish extravagance, to employ "cheap" teachers at any price. By "cheap" teachers we mean, of course, those who are willing to work at a salary much below the average of their class, and who are worth no more than they ask.

In employing principals and assistants at "bottom" prices, it is apparent that an injury is inflicted somewhere. If the teachers are efficient, they are entitled to living wages, and it is as dishonest for a community as for an individual to get something for nothing. If not efficient, directors may pride themselves on the low *per capita*, but they had better not examine the school children too closely.

Our readers will remember the excellent article, "What Schools?" written by Dr. GREGORY, and published in our last number. Well, *The Chicago Times*, ever vigilant in discovering the educational sophistries with which schoolmasters are endeavoring to mislead the dear people, snuffed the heresy afar, and proceeded recently, in a column editorial, to annihilate the Doctor, his argument, the Industrial University, and the public High School.

The attack upon the Doctor personally, of course, merits no attention. He needs no defense against an antagonist whose settled policy seems to be

to speak well of no man : and such assault can provoke a smile only, for the Institution, that was inaugurated and carried beyond its period of experiment by him, will be sending its cultured graduates into the ranks of citizenship when *The Times* shall have become a tradition.

But to the argument!

Its essence is that instruction above the "common-school branches" is a luxury which but few can enjoy, hence it is wrong to tax a community for its support.

What are the "common-school branches?" If they are the "three R's," then how much of them? Where does arithmetic begin to be a luxury? What is the "common-school" limit to reading? Is the primary school the "Ultima Thule" of the State's responsibility, or at what link in the chain shall we take our stand, and say "thus far and no farther," at public expense? The average high school indulges in few luxuries. It does little more than to take the pupil beyond the wearisome routine of the commonest branches and teach him something of his duty to himself, of his relations to his surroundings, and of the sources of knowledge. But that little is a revelation, and instead of being embraced by the few, it is coming to be seized upon by the many. Says *The Times* :

There is no evidence that we have better educated rulers in consequence of free public high schools and colleges. The majority of the members of the continental congress were college-educated men, though there were no free high schools or colleges. All our early presidents, except Washington, were liberally educated. Now that there is a free high school in every village and a free college in many of the states, we have presidents and congressmen wonderfully deficient in both intellectual and moral education. It is certainly true that the half century before the existence of free high schools gave the country very much better educated rulers than it has known since.

Here is a new argument against the free high school! It is not a luxury, now, but a positive injury to our civilization, and should be treated like any other destructive agent.

Many of the members of the early congress were college men, but the curriculum of the Chicago high school to-day is more comprehensive than was that of many of the colleges whose Alumni graced congressional halls in the young days of the republic. Then the cultured senator or representative was the exception; to-day he is the rule, if he happens to hail from a quarter of the country where high schools are popular.

The last sentence in the above quotation we simply pronounce to be untrue.

Again :

Free high schools and colleges were never demanded by the general public, nor were they created to supply any existing want. They were called into being by persons who believed that the state should relieve individuals of all expenses in the matter of education.

And yet "there is a free high school in every village"! It seems very strange that an institution for which there has never been a general demand

should have such an unprecedented "run." The instant that a majority of the people in any locality desire to dis-establish their high school, they can do it. They are the sole arbiters of its destiny. How many of them go to destruction annually, killed by an indignant constituency? We have yet to hear of the first one.

No! the day has passed in Illinois when high-school instruction is regarded as a luxury. It is a necessary part of our school machinery, and to dispense with it would be impolitic, uneconomical, as Miss WEST has clearly shown, and a step backward.

When the "Oldtown Folks" were attending to the little matter of living out their day and generation, the village preacher was the local oracle. From his decision of matters, temporal or spiritual, there was no appeal. In later times, and a trifle farther west, the weekly newspaper mounted the rostrum and pronounced opinions which were supposed to be the end of the law. And it held its authority fully as long as it should. But the era of personal abuse brought with it the decline of the power of the press as a former of public opinion. The fact that *The Times* or *The Tribune* takes this or that position respecting any public policy or man counts for naught in these latter days. The idea that the editor is shaped from common clay seems to have taken hold of the minds of the general public. He has been stripped of his impersonality and has become plain "JOE MEDILL" or "STOREY." The people are beginning to think for themselves.

The reverence accorded to the pulpit and the press is still bestowed in unmeasured stint by the children of the schools, upon the books wherein they find their daily tasks. It seems to be a tendency of human nature to select some arbiter and endow it with the quality of infallibility. The thought that the book may be wrong does not enter the mind of many a teacher, even. Who has not found his pupils unthinkingly reciting some gross error of the text?

We should teach the children to criticise their books. It was our fortune to use, some time since, a book that came from the press with blunders that could be counted by the score. But the class, and it was composed of adults, smilingly swallowed the most contradictory statements.

When their suspicions were awakened, that book aroused more enthusiasm for critical study than any that we have used since. We do not advocate the intentional introduction of errors into the text, but we do urge that teachers should impress upon their classes the thought that a statement is not true simply because it is printed in a book.

How long will it be before people will learn that those things are not cheapest which cost the least money? A few months ago a school district, less than a thousand miles from where we write, applied to a well-known expert in the black-board business to prepare its walls. The price for first-class work was given. But who can't make so simple a thing? A man "who had seen it done," undertook the task at half the price asked by the expert. The School Board gave him the job and congratulated themselves upon a net saving to their constituency of several dollars. But a few months have passed and the walls look as if they were suffering from a chronic attack of the measles. The cheap boards were a failure and the money was thrown away. The expert will probably be called in to remedy the difficulty as best he can. *Those things are cheapest which give the largest return in proportion to the outlay.*

WILLIE BROWN, aged about 10 years, ran away the other day from his home in Washington, to become a pirate, or a wild trapper of the desert—he didn't care which—and was found in Baltimore boo-hooing. He had been perusing dime novels.

The above is but one of several similar statements that we have lately seen in the public papers. There are many other juvenile crimes and follies that may be traced to the same cause. When we read of a harrowing case of suicide by some boy in his teens, whose father may have given him a deserved castigation, or by some chit of a girl whose mother may have objected to her spending her evenings upon the street, we have wished that the coroner had not rendered his verdict until inquiry had been made as to the literature which the deceased may have favored. We see it stated that PIPER, the Boston "fiend," was very fond of the "blood and thunder" tales. We can easily believe it; and in that fact can see some possible reason for his hideous crimes. To our mind, it is an open question whether vile literature is not doing more evil to-day than alcoholic drinks? Were we to speak on this question at the lyceum, we should take the affirmative. And what are parents and teachers proposing to do about it? Or are they delighted at ease, because the "dear children are so fond of reading?"

The School Directors of Winnebago County, under the lead of Mrs. MARY L. CARPENTER, County Superintendent, have done a very wise thing,—one worthy of imitation by the Directors in other counties. They have formed an efficient association which held its first meeting at Rockford on the 25th of February. Carefully prepared papers were presented, treating of the following topics: "School Visiting," "Regular Attendance," "Care of School Premises," and "Uniformity of Text-books." We have received copies of all these addresses, together with the resolutions adopted. We

should be glad to lay some of them before our readers, did our space permit, for they contain many excellent thoughts. The only thing we observe in any of them to which we seriously object, is the crude and foolish idea that our State should go into the business of publishing school books. It is time that this nonsense should die a natural death. Supt. ETTER was present and gave an evening address; it was a good one, and seemed to afford much satisfaction to the large audience which heard it.

As we have already said, we commend this step of the Winnebago Directors, and wish that it might soon happen that we could number one hundred and two such associations in our State.

Our readers do not need to be told that the great Centennial Exhibition was opened at Philadelphia, with much *eclat*, on May 10th. We print in this number WHITTIER's grand hymn which was sung on that occasion. We learn that the Illinois educational department is very creditable to the State, or rather to the teachers and school officers by whose labor and money alone, it has an existence. We hope and expect that a very large number of the teachers of the State will go and see it for themselves. An old and valued correspondent and subscriber asks how the teachers of Illinois who visit Philadelphia may find each other. In reply, we suggest that each teacher on reaching the exhibition leave, with Mr. S. H. WHITE, his name, place of boarding, and the length of time he proposes to stay.

The American Journal of Education thus frankly expresses itself concerning the vexed question of closing the exhibition on Sunday.

We are glad the managers had the good sense and stamina to close the grounds to the public on Sunday. There is by far too much of a disposition manifested to ignore the law of God in regard to the proper observance of the Sabbath or seventh day, and if our friends from abroad come, they come expecting to obey our laws and conform to the requirements of our institutions while here. The cessation of labor on Sunday is an American Christian Institution, to be observed as much during 1876 as any other year.

To all of which we say *Amen*, like a Methodist. The plea for Sunday opening has been made ostensibly in the interest of *laboring* men. But, if the laboring men of our country are wise, they will be the first to frown upon any movement that has a tendency to break down the sacredness, quiet and rest of our American Sunday. And, this is the true course for every lover of his kind, and of the Institutions of our country, wholly independent of any opinion he may hold concerning the divine origin or sanctity of the day.

There are certain kinds of newspaper wit (?) that seem to be very fashionable just now, but which are as demoralizing as they are stupid. One is shown in the concocting of little paragraphs whose only interest, if they have any, lies in the most outrageous twisting of words. It has been said that a

pun is the lowest kind of wit ; but a genuine pun is wit itself compared with most of these abortive attempts. They would not only never excite laughter in one who has a thimble-full of brains ; but some of them are bad enough to make even a monkey *stop* grinning. Still worse, are such as the following : "Little Johnnie's mother don't mend his jacket any more ; he played with a pistol, and has gone to be an angel." One who can write such stuff has as little feeling as sense ; he ought to go and be chaplain to a band of Ku-klux.

We see, by the Aurora papers, that somebody in that city is conducting a violent attack upon public High Schools, through their columns. His arguments are the stupid trash that has been advanced and answered, time and again. The most prominent is that the poor are taxed that the children of the rich may receive a High-school education. We think the statistics of any public High School in the country will show that the poor receive a larger proportion of the instruction there imparted, than they contribute to the expense of the school. Look the matter up, friends, and see if this is not true. Besides, if the public High School did not exist, the children of the rich would be furnished an education of similar grade elsewhere ; but where would the children of the poor find any such favor whatever ? Certainly, the poor men are the last who should find fault with the public High School. But then, this argument is "of a piece" with the demagogue's argument in other fields ; intelligent demagogues do not believe them themselves, but think they will have weight with the ignorant. In respect to the discussion at Aurora, however, there is little to fear, for the High Schools have a champion who is a full match for his opponent.

The *Kinder-Garten* is receiving more and more attention in our cities. This is well, for while these schools can never take the place of the primary school, in our public-school system, there is a place that they fill most admirably. Besides, it will do our teachers and people good to become familiar with FROEBEL's ideas and system. The danger is that we shall have three *sham* Kinder-gartens for one real one. Any teacher or other person who desires information in respect to these schools, will do well to send to E. STEIGER, 22 and 24 Frankfort St., New York, for specimens of his Kinder-garten literature. And any parent who has one or more "wee ones," would do well to remit to Mr. STEIGER three dollars, and receive in return his material for Kinder-garten occupation. It is beautiful ; and, with the full directions accompanying, it would seem that any intelligent mother could make use of it. We commend it from personal knowledge.

A bill proposing to give pensions to persons who had performed long service in the public schools, was before the New York Legislature at its recent session. We believe final action upon it was not reached at the time of adjournment. Many of the best newspapers advocated this bill most earnestly, and said very true and very pleasant things regarding the debt the community owes to its faithful teachers. This is all very well; we are glad to see anything that looks like a recognition of the teacher's true place and worth. Nevertheless, we desire to see the teacher's services recognized in some other way than by a pension. If his services are valuable, *pay him a reasonable salary* and let him provide for old age as others do. He either earns the money—which it is proposed to give him as a pension, or he does not. If he does not, we protest against giving him an out-and-out gift. If he does earn it, pay it to him *as he earns it*, and do not steal from him in the present that you may have something to give him by-and-by. We want to see nothing done that shall detract from the teacher's manhood; and, to our mind, this proposal of a pension is equivalent to saying to a teacher, "You are a very useful and necessary person, but you are such a fool, after all, that you are not capable of managing your own earnings." We claim for the teacher, as for every one else, a fair and even chance,—justice; and then we demand that he be made responsible for his own actions and management. Thank you, not any *pension* for us, if it is all the same to you.

Prof. FORBES's list of proposed candidates for the Natural-History-School, at Normal this summer, is rapidly filling. Friends, if you want to be "counted in," send word *at once*.

QUERIES AND CORRESPONDENCE.

What is your opinion about graduating classes from High Schools?

N. C. C.

We suppose our correspondent means to inquire about the propriety of "graduating exercises." If the High School is a real High School, we think such exercises highly appropriate; although we would not commend all the nonsense of dress, show and pretense that sometimes attends them.

Is our present English orthography what it should be? Why?

Would a pure phonetic representation facilitate the acquisition of knowledge? Why?

Will memorizing meaningless signs give us any better idea of the history of words? Why?

J. C. L.

We have not space nor time to say all we think on the points suggested by our correspondent's questions. But we think the opinion implied in the

second has arguments on both sides. If we were to debate it, we should incline to the negative. We have never known any one who had studied the subject of language profoundly, to be an earnest advocate of the affirmative.

But, if our opinion of the desirableness of the proposed change were ever so strong, we should hesitate to advocate it; it could not be accomplished in three generations.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

At the present writing, Chicago is enjoying the questionable luxury of two mayors; Comptroller HAYES is arranging an armistice between the contending hosts of COLVIN on one side, and those of HOYNE on the other: City Collector VON HOLLEN walks off with anywhere from \$30,000 to \$200,000 of the public money without so much as saying by your leave. The teachers are more than three months without their salaries; a special committee on schemes, of the Board of Education, are deliberating on the matter of making further improvements in the educational system of the city. It is a time characterized by great uncertainty in local affairs, and the SCHOOLMASTER commends the exercise of the theological virtues—faith, hope and charity,—as about the only occupation that promises to be accompanied or followed by much satisfaction.

We bespeak the sympathies of teachers and friends of education everywhere for the FLOATING TEACHER of Chicago. She has attracted unwonted attention of late. Her name has been seen in the newspapers. At her has the slow unmoving finger of public scorn been pointed as the pet or favorite of somebody, and the unblushing and thankless enjoyee of "soft things," innumerable. The FLOATING TEACHER hath this occasion to be. Many years ago a board of education taking into account the probabilities of human capacity and endurance, and the possibility of human strength, thought that there ought to be a definite and substantially uniform ratio between the number of pupils in a school, and the number of teachers, and decreed that there should be one teacher for every forty-eight pupils in the grammar department, and one teacher for every sixty pupils of the primary department of every school. This rule has been so far modified in certain districts (in which the powers that be seem to think they have done their *whole* duty when they have provided *half* enough accommodations for the pupils in attendance, whence the organization of half-day divisions) as to furnish one teacher for every eighty pupils. The standard room being seated to accommodate sixty-three pupils, it often happens that in schools having large grammar departments, the rule allows more teachers than rooms, while in buildings where there are half-day divisions, the custom is to allow one floating teacher for every two rooms; that is, three teachers for every two hundred and forty pupils. Under the operation of the rule, there are less than forty floating teachers in the city, and a very large proportion of them are working in the half-day divisions.

Now, notwithstanding many published innuendoes to that effect, the position of the floating teacher is not a sinecure. Her programme is a definite and much more arbitrary one than that of the regular teacher. In the half-day divisions, the floating teacher works without intermission with pupils who are subject to school influence only half of each day, which means that they are generally subjected to street influences the other half. In the grammar department the FLOATING TEACHER's work is not free from embarrassments. If, as frequently happens, she is employed on a special subject, she has to work in a great number of rooms where

she will frequently find extremes of discipline and spirit, or mayhap occasion them. Her recitations are often heard in an overheated, ill-ventilated or badly lighted hall, where she is subjected to a multitude of annoying, distracting or embarrassing interruptions. Under the most favorable circumstances her path is not one of roses. There is probably not a single floating teacher in the city, who would not rejoice exceedingly at an opportunity to take charge of a division. And yet these are the teachers which an intelligent press stigmatizes as pampered pets provided for by an absurd rule!

The May meeting of the Principals' Association was held at the rooms of the Board of Education, on the 6th inst. The meeting was quite large and interesting.

Superintendent PICKARD cautioned against the formation of too large classes in the primary department, alleging that few teachers possessed power enough to secure and hold the attention of such classes. He thought that there ought to be not less than four classes in a room in each of the three lower grades. He also intimated that there was a possibility of large primary rooms being made too home-like, and urged that teachers be reminded that some restraint was necessary and desirable in such rooms. Mr. PICKARD also alluded to the fact that the average age of pupils in the different grades was sensibly diminishing, owing to the large number of promotions that have been made, and suggested the danger of an injurious extent of reaction from the high standard heretofore required before classes were permitted to "pass grade."

The question of discussion for the meeting was, "What can be done to improve the morals of pupils?" The discussion brought out quite a diversity of views, and was listened to with much interest. While no one enunciated the doctrine of total depravity, and it was generally agreed that the boys and girls of to-day, were different from, and better in many respects, than those of fifteen or twenty years ago, there was also a very general conviction that the millennium had not yet been reached, and that the question under discussion was one of the most important problems of pedagogics. Those who participated in the discussion were Messrs. BROOMELL, SLOCUM, BAKER, HANFORD, STOWELL, HEYWOOD and PICKARD. The topic for discussion at the June meeting, which is the last meeting for the year, is "School Exhibitions."

The death list is further swelled by the name of Miss HAWKINS, of the Jones School. This young lady left her work in school some time ago, and went to Florida, in the vain hope of regaining her lost health. The already large number of teachers who have passed from us since the commencement of the present year, embraces many whose services can ill be spared. There is every reason to believe that Miss HAWKINS was a teacher who did not spare herself when it was a question of duty to her pupils.

A movement is on foot to induce Superintendent PICKARD to prepare an address on the subject of Moral Culture in the Schools. The movement was inspired by the satisfaction which was given to those who had the pleasure of listening to his *impromptu* remarks on the same subject, at the recent meeting of the Principals' Association.

We are in receipt of the following letter, which explains itself:

CHICAGO, May 8th, 1876.

DEAR SCHOOLMASTER:—The undersigned was an interested listener to the discussion of the question of Moral Culture, at the Principals' meeting of Saturday last. There was one matter frequently broached, upon which, the more he thinks about it the more he is satisfied that his views do not accord with the prevailing sentiment either of the Principals' Association, or of teachers generally. In short, he strongly suspects his views to be heterodox, and with malice aforethought, he solicits the privilege of laying his darling heresy before your readers.

Most of the speakers, on the occasion referred to, condemned without qualification, the practice of what they were pleased to call "cheating" on the part of pupils on examination, and in the daily recitations. This so-called cheating, was alleged to consist of communications between pupils, about the subject matter of the examination or the recitation. Now the undersigned has good reasons to believe that such communications often take place without serious moral delinquency, and without doing great injustice to the talent of the pupil supposed to be assisted; and he holds, therefore, that it is injudicious, if it isn't hypocritical, to teach young people that all such communications are sinful, and that they contaminate both parties to them.

The undersigned will illustrate his meaning further by two examples from his own experience. At one time, for his sins doubtless, he was induced to spend a portion of his time in the study of the French language, when he was a student in school. As a matter of course, he was subjected, near the close of the year, to an examination to determine his fate for the next year. Without any apology for the seeming egotism, the undersigned takes the liberty to say that his knowledge of the ground passed over was second to no one in the class. Among the things called for, was the conjugation of the verb *s'asseoir*. The conjugation was hastily written, we were working on time, without noticing that it was a reflexive verb, and consequently with an important part omitted about one hundred and twenty times. A class-mate, who was also the only one in the class who could by any chance rival the undersigned, secured his attention a moment, having noticed the omission, and said "don't you see it's reflexive?" That was enough, and the error was corrected. The second instance occurred later in life, upon an occasion when the undersigned was undergoing an examination for a teacher's certificate. The examination was held in a church at the close of a large institute, and, in consequence, the accommodations for examination were very imperfect. It was the fate of the undersigned to be a candidate for a certificate of an advanced grade, and he was placed on a very low seat which was also very crowded. The seat directly behind him was occupied by a young lady who was a candidate for a certificate of the same grade, and was consequently writing the same set of questions. In solving an algebraic equation, the undersigned failed to insert the proper sign, and of course reached an erroneous result. The young lady, who was an excellent scholar, said "Mr. Simple, that sign before \times ought not to be the minus." The error was at once perceived, and the work revised. It is now many years since these occurrences, but the undersigned has not forgotten the kind George or gentle Olivia who risked serious trouble for themselves out of friendship for him! No amount of forcible reasoning, or defense of the inculcation of selfishness, will induce him to admit that in the cases stated they were guilty of moral obliquity; or, that in doing as they did, they did not perform a noble and generous deed, and one of which the beneficiary would be unworthy if he did not now bear this testimony!

Wherefore, the undersigned ventures the suggestion that the heinousness of this sin was exaggerated at the meeting referred to, and that what we teachers require as a mere disciplinary convenience to ourselves is too often metamorphosed into a moral law, which, under all circumstances, is to be held inviolate. Readers of Dickens will remember a certain Mrs. Harris who did considerable duty in the way of a guide and authority for one Sairey Gamp; and how at the close of an eventful and convivial visit the sturdy Betsy Prig extinguished Sairey's guiding star by intimating that she did not "believe there was no such woman." Similarly, the undersigned avows his disbelief in the much deplored sin of "cheating," especially in recitation; and he further avows his belief that most of the evil that goes by that name is justly chargeable to lazy and mechanical teaching, and to injudicious, incompetent, and tyrannical examinations. So, there now!

Very truly, Yours,

PETER SIMPLE.

DIED, May 2d, 1876. Miss ANNA BYRNER.

A brief telegram to the Chicago *Tribune* brought this sad announcement of the death of one of the best teachers connected with the public schools of this city.

Miss BRYNER was appointed to the Franklin School in 1868. After two years successful service, she was elected to a position in the High School, which she retained until last Christmas, when the strong will that had so long sustained her was obliged to yield to the assaults of disease. During all those years she taught with rare success in spite of very great physical debility, and by her unflinching devotion to duty won the highest regard from all who knew her. Her associates will remember her as a christian lady, gifted, cultured, refined, and most unassuming; her pupils, as a true teacher, patient, affectionate, apt to teach, and a real friend. Miss BRYNER possessed, in a marked degree, those characteristics of the ideal teacher which inspire pupils with a high sense of self-respect, a profound regard for the right, and enthusiasm in the acquisition of knowledge.

May sweet remembrance of such teachers be a constant benediction to those who assume the burdens where they lay them down.

EDUCATIONAL INTELLIGENCE.

REPORT OF ATTENDANCE FOR APRIL 1876.

	No. of Days of School.	Av. Number Enrolled.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	SUPERINTENDENTS.
Bloomington.....	20	2 209	2 208	92-4	542	.....	Sarah E. Raymond.
Peoria.....	20	2 018	2 867	89-1	271	433	.....
Hannibal, Mo.,.....	20	1 945	1 156	91-3	151	455	*G. W. Mason.
+Belleville.....	20	1 046	1 863	83	180	395	Henry Raab.
+Rock Island.....	20	1 491	1 251	87-3	63	569	J. F. Everett.
Warsaw.....	20	935	809	86	54	323	John T. Long.
Moline.....	20	855	727	85	25	340	L. Gregory.
Marshalltown, Iowa.....	20	892	775	85-1	80	295	C. P. Rogers.
Macomb.....	20	784	617	92	36	210	J. G. Shedd.
+Morris.....	20	646	537	83	170	223	M. Waters.
+Amboy.....	20	594	494	83	169	171	L. T. Regan.
Shelbyville.....	20	560	447	93	87	179	T. F. Dove.
+W. Champaign.....	20	549	469	85-5	88	180	W. H. Lanning.
+Pontiac.....	19	491	395	87	270	124	C. H. Rew.
+Wilmington.....	20	460	369	80	164	171	R. H. Beggs.
Rochelle.....	20	455	396	94-4	15	258	P. R. Walker.
Lacon.....	20	390	350	93	63	96	D. H. Pingrey.
+Lena.....	22	350	280	80	10	82	C. W. Moore.
Warren.....	20	336	298	91-3	22	123	D. E. Garver.
N. Belvidere.....	14	259	237	95-6	8	173	H. J. Sherrill.
+Petersburg.....	20	280	213	80	.....	55	M. C. Connelly.
+Marine.....	20	221	181	82-4	45	55	Wm. E. Lehr.
+Wenona.....	20	173	157	84	264	73	J. A. Holmes.
Sterling 2d Ward.....	20	477	446-4	95-6	99	245	A. Bayless.
Walnut.....	20	113	86-4	96	57	84	G. P. Peddicord.

NOTICE.—These reports must reach us before the 16th of the month to insure publication.
+New Rules. *Principal High School.

Morgan County.—The last regular meeting of the Morgan County Teachers' Association was held April 1st, in the County Superintendent's rooms, Jacksonville, Ill. The meeting was called to order at the usual hour, 10 o'clock a. m., by the President, Mr. HIGGINS. On account of the almost impassable state of the roads, most teachers from a distance were not present till in the afternoon. But the exercises of this session were listened to by about thirty teachers, besides several others who were interested in the cause of education.

After devotional exercises, a class exercise in mental arithmetic was conducted by Supt. HIGGINS, and was followed by a discussion of the same, on the points of accuracy and rapidity. Miss EMMA C. PIERSON was then called to lead an exercise on the subject of punctuation, which was an interesting as well as valuable exercise. We were next favored with a song by Misses L. WILLIAMS, E. BRAUN, and Messrs. J. R. LONG and H. H. WILLIAMS. A declamation by Mr. A. C. RICE was well prepared and well rendered, on the subject, "Spartacus to the Gladiators." Irregular business was next in order, and the following committee on programme for June was appointed: J. R. LONG, A. HORNEY and A. H. MEEK. A paper on "Changes" was then read by J. R. RICHARDSON, illustrative of the changes continually taking place in organic and inorganic nature. This was followed by some remarks by Supt. HIGGINS, concerning the importance of the teacher knowing more than is usually given in the text-book on the subject treated of, as anything of importance that the teacher may add, seldom fails to interest the pupil. Adjourned. Committee.

Coles County.—Most of the town and city schools will close about the middle of May. Many changes of teachers are talked of in consequence of a tendency to reduce salaries. Some old and well tried teachers will thus be exchanged for new beginners and quacks, in the name of economy. Such economy usually costs more than the evil it is intended to remedy. The schools of Mattoon and Charleston are in a flourishing condition. Large classes will graduate from each this year.

Lee County.—From the report of Mr. REGAN, of Amboy, we take the following summary:

1. The average number of pupils for each teacher should be less than it is now.
2. We should have a sufficient number of school rooms, so that every teacher below the high school would be given the charge of a room.
3. The rooms should be larger than some we now use, and fewer pupils be assigned to each room, in order to secure better ventilation, and, consequently, afford better preservation of health.
4. Most of the school rooms should be in one building, so that the grading may be more perfect, and promotions be made more frequently.
5. The high school should be afforded ample accommodations, in order that the best results may be attained, and because of its influence upon other schools.
6. Our schools should have an educating influence upon the community, and should also represent properly its refinement and intelligence.

Amboy is entirely free from school debt.

La Salle County.—ED. SCHOOLMASTER: I visited the public school in Tonica last week, and I believe it is not too much to say that I never saw a school that seemed so little "kept." I sat for an hour or two in the high-school department, and witnessed the *teaching* going on there. I say *teaching*, for that was all that Miss BULLOCK, the principal of the school, seemed to be doing. The room contained some forty pupils, and while I listened to recitations in algebra, grammar, and arithmetic, I observed not the slightest disorder. Each pupil seemed to be pleasantly minding his own business. The teacher did not speak to any one in the room except to the boys and girls reciting, and there was no need of speaking. The school seemed to keep itself. The teaching was most excellent. Either the pupils of that school are exceptionally good, or the teacher is just what a teacher should be. "S."

Pope County.—From the report of Supt. ROSE we take the following:

Cost per scholar for the last year, upon actual enrollment.....	\$6 87
Average wages.....	35 07
Number of school houses in the county, log 88, frame 21, brick 1; total.....	60
Persons of school age.....	4,018
Illiterate.....	179

Thirty-one first, and forty-nine second, grade certificates were granted during the year.

Mr. ROSE has the following to say about the Institute:

"This organization has done more in the past ten years to improve the teachers of the county than all other agencies combined. The opposition that it first met with by the people is fast being removed, and the few who now oppose it are those who know nothing about it. It gives that skill and strength of purpose to the teacher that cannot be found elsewhere. It has been my observation that a majority of the failures that have been made were by those teachers

who failed to attend it. The Institute last year was held at Eddyville, with a good attendance of teachers and friends. During the coming year it is the intention to hold an Institute (probably at Independence school house,) and it is earnestly hoped that all teachers, school officers and friends of education will attend."

Mr. ROSE thinks that penmanship receives too little attention; that great improvement has been made in teaching reading; that spelling is not taught well; that there is too much geography and too little history, and too much text-book in grammar; that arithmetic is "looking up," and that some of the schools are doing excellent work in the sciences. He urges parents to interest themselves in the schools, and gives some very good advice to the teachers.

The Sixteenth Annual Meeting of the National Association will be held in the Academy of Music, Baltimore, Md., on Monday, Tuesday and Wednesday, July 10th, 11th and 12th, 1876.

Papers and Reports will be presented before the General Association and the several Departments, as stated below:

GENERAL ASSOCIATION.

1. Address of Welcome by the Governor of Maryland and the Mayor of Baltimore. Response by the president. Annual Address of the President.
2. The Demands of the New Century upon the American Common School; by Rev. A. D. MAYO, Springfield, Mass.
3. The Normal Schools of the United States—their Past, Present and Future; RICHARD EDWARDS, LL. D., late President of the State Normal University, Normal, Illinois.
4. The Country-School Problem; Professor EDWARD OLNEY, of the University of Michigan.
5. The Moral Element in Primary Education; Hon. W. H. RUFFNER, State Superintendent Public Instruction, Richmond, Va.
6. Educational Terminology and School Grades; DUANE DOTY, Esq., Asst. Superintendent Public Schools, Chicago, Ill.
7. Report on Course of Study from Primary School to University; WM. T. HARRIS, Superintendent Public Schools, St. Louis, Mo. Chn. Committee.
8. Report on the School Work of the World as represented at the Centennial Exposition; Hon. WARREN JOHNSON, of Maine, Chn. of Committee.

DEPARTMENT OF HIGHER EDUCATION.

1. Address by the President NOAH PORTER, Yale College.
2. Greek Syntax; Prof. B. L. GILDERSLEEVE, Ph. D. LL. D. JOHNS HOPKINS, University, Baltimore.
3. The Political Economy of Higher Education; Hon. H. A. N. HENDERSON, State Superintendent Public Instruction, Kentucky.
4. Position of Modern Mathematical Theories in our Higher Courses of Pure Mathematics; WM. M. THORNTON, Adjunct Professor, Applied Mathematics, University of Virginia.
5. Position of Modern Languages in our Systems of Higher Education; Prof. E. M. JAYNES, Vanderbilt University, Nashville, Tenn.
6. The Systematic Organization of American Education; Dr. JOHN W. HOYT, Madison, Wis.
7. History of South Carolina College from 1810 to 1860; Prof. W. J. RIVES, Washington College, Maryland.
8. Report of Orthoepey; Prof. SAWYER, Lawrence University, Appleton, Wisconsin.

DEPARTMENT OF NORMAL INSTRUCTION.

1. Report on Practice Schools; Miss D. A. LATHROP, City Normal School, Cincinnati, O.
2. Three Important Considerations for our Profession: 1. What is a School? 2. What are its Rights and Duties? 3. Some Consequences from the above; President J. H. HOOSE, State Normal School, Cortland, New York.
3. Relations of Normal Schools to Other Schools; President J. BALDWIN, State Normal School, Kirksville, Mo.

4. Professional Course of Study for Normal Schools; Professor JOHN OGDEN, Washington, Ohio.

5. What may Normal Schools do to form Right Habits of Thought and Study in their Pupils? Prof. C. A. MORLEY, State Normal School, Winona, Minn.

6. Methods of Professional Training in Normal Schools; Principal J. W. DICKINSON, State Normal School, Westfield, Mass.

DEPARTMENT OF ELEMENTARY INSTRUCTION.

1. The Kindergarten, with Illustrations; Hon. B. G. NORTHROP, Secretary State Board of Education, Connecticut.

2. How shall we train our Primary Teachers; Supt JOHN HANCOCK, Dayton, Ohio.

3. Text Books Adapted to our Modern System of Education; JAMES CRUCKSHANK, LL. D., Brooklyn, N. Y.

4. Paper by Miss MINNIE SWAYZE, Trenton, New Jersey.

5. Practical Aspects of Object Teaching; Hon. M. A. NEWELL, Maryland.

6. Common Sense in Education; Wm. J. DAVIS, Editor *Home and School*, Louisville, Ky.

7. Report on Art Education; JOHN Y. CULYER, Brooklyn, N. Y. Chn. Com.

DEPARTMENT OF INDUSTRIAL EDUCATION.

1. Opening Address: President S. R. THOMPSON, Nebraska.

2. The Industrial Education of Women; Hon. EZRA S. CARR, State Superintendent of Public Instruction, California.

3. Instruction in Manual Arts in Connection with Scientific Studies; Prof. MANLY MILES, Illinois Industrial University.

4. What can be done to secure a Larger proportion of Educated Labor among our Producing and Manufacturing Classes? Prof. WM. C. RUSSELL, Cornell University, New York.

5. How Far should Industrial Schools engage in the attempt to extend the Limits of Science by Experiment or otherwise? Prof. E. M. PENDLETON, University of Georgia.

6. Drawing as an Element of Advanced Industrial Education; C. B. STETSON, Boston, Mass.

N. B.—Authors of Papers and Reports will please bear in mind that *brevity* is the existing rule of the Association.

HOTEL ACCOMMODATIONS.

The following Hotels will entertain members of the Association at the reduced rates stated: The Carrollton and Barnum's, \$3.00 per day; the Eutaw, \$2.50 per day; the St. Clair, and Howard House, \$2.00 per day.

RAILWAY FARES.

All efforts to effect reductions on railroads beyond those arranged for visitors to the Centennial have proved unavailing up to this date. Should any change occur in this respect it will be noted in the circular to be issued within ten days from this date.

W. D. HENKLE,
Secretary.

WM. F. PHELPS,
President N. E. A.

Institutes will be held as follows this summer: In McHenry Co., one week, in August; details not completed.

In Sterling, Whiteside Co., six weeks, beginning July 10. Tuition \$5. For particulars address O. M. CRARY, Co. Supt., Lyndon.

In Montgomery Co., at Hillsboro, commencing first Monday in June, continuing ten weeks. Tuition \$8. Board at \$3. Address FRANCIS SPRINGER, Co. Supt., Hillsboro.

In Champaign Co., at Champaign, Aug. 14-31, inclusive. S. L. WILSON, Co. Supt.

In Franklin Co., at Benton, commences July 10; lasts two weeks. J. W. ROSS, Co. Supt., Benton.

In Stark Co., at Toulon, commences June 19; continues two weeks. Tuition \$3. A. B. ABBOTT, Co. Supt., Bradford.

In Stephenson Co., at Dixon, opens July 10, and continues six weeks. For particulars, address REV. O. G. MAY, Dixon.

In Effingham Co., at Effingham, opens July 10; continues five weeks. Tuition \$6. Address OWEN SCOTT, Co. Supt., Effingham.

In Adams Co., at Camp Point, opens July 5th, and continues four weeks. J. H. BLACK, Co. Supt., Quincy.

In Knox Co., at Oneida, opens July 9th; continues three weeks. Tuition \$3. MARY A. WEST, Co. Supt., Galesburg.

In Mason Co., at Mason City, opens about July 1. Particulars not received. S. M. BADGER, Co. Supt., Mason City.

In Pike Co., at Barry, opens July 10, and continues six weeks. Will be conducted by J. N. DEWELL and A. C. MASON.

In Clark Co., at Marshall, begins July 17; continues four weeks. Tuition \$3. EDWARD PEARCE, Co. Supt., Marshall.

At Robison, Edgar Co., July 5; continues eight weeks. Address E. CHILCOAT, Paris.

At Metamora, Woodford Co., July 17; continues four weeks. Address J. E. LAMB, Co. Supt., Low Point.

Some of the above-named Institutes will afford special opportunities to teachers. Brother CHARY, as usual, has arranged a sumptuous repast for his people.

SMITH of McLean, and WILSON of Champaign, will not be behind.

CHAMPAIGN, ILL., MAY 3d, 1876.

EDITOR SCHOOLMASTER:—I am sorry to see that you have given space to that little item headed "Official" in your last number. Certainly the eminent (?) jurist who rendered that decision had not read the school law of 1875, or else he does not understand the meaning of the term "*qualify*." I will quote Section 2 of an Act to authorize the election of women to school offices. "That any woman elected or appointed to any office under the provisions of this act, before she enters upon the discharge of the duties of the office, shall *qualify* and give bond as required by law." What law? Why the fundamental law, certainly. Constitution of Illinois. Is the above a part of the school law, or not? If so, what does it mean?

S. L. WILSON.

BOOK TABLE.

Robinson's Shorter Course. First Book in Arithmetic, Including Oral and Written Exercises: By DANIEL W. FISH, A. M. 154 pp. IVISON, BLAKEMAN, TAYLOR & Co.: Chicago and New York.

There are not a few excellent features in this little book. And, first, we commend the pictorial illustrations, which, besides being noticeably neat and attractive, are singularly clear and suggestive. A form of table entitled "Equal Parts of Numbers" is introduced in logical recognition of a class of problems requiring the separation of a given number into a certain number of equal parts. For example, paid 20 cents for 5 oranges, what did each orange cost? The common division-table. (14 divided by 7 equals 2; 21 divided by 7 equals 3, &c.), is accordingly accompanied by this table of equal parts, "One-seventh of 14 equals 2; one-seventh of 21 equals 3, &c." This we commend, and we wish that all teachers who read these lines and who have not already felt the need of teaching two classes of solutions in division, would give a half hour to the consideration of the subject. Quite a number of our recent authors are explicit here; a few ignore the matter, and one popular author attempts to reduce all problems in division to one style of solution. We say "attempts," for when he reaches an advance page of his work, he adopts a second form.

We would gladly quote full paragraphs from the four pages of "Hints to Teach-

ers," so just and practical do they appear. We agree with Mr. FISH, that "Primary arithmetic does not involve any complicated processes of analysis," and we like his recommendation "that formal analysis be used but sparingly with beginners." "Primary Arithmetic," says our author, "can do little more than put the pupil in possession of the *alphabet* of numbers, and make him familiar with the various tables, securing readiness and accuracy in their use, and neatness and skill in written exercises upon them." The First Book seems well adapted to secure these ends. In adverse criticism of this work, we have to name:

1. The common misuse of the word "figure" for *number*. It is painful to meet the expressions, "add figures," "multiply by each figure separately," "under the figure divided," "the quotient figure is too great," and the like.

2. Erroneous or ambiguous teaching, as shown in the questions, "What is one-half of 18 plus 16?" "one-seventh of 60—4?" Now, the following forms are not only accordant with mathematical usage, but they are unambiguous, and hence two of them should be allowed to displace those we have just quoted. To one-half of 18 add 6. What is one-half the sum of 18 and 6? From one-seventh of 60 take 4. What is one-seventh of the difference between 60 and 4? If it be urged that thus we fail to teach signs, we offer fuller, and yet easily comprehended, forms:

one-half of (18 plus 6); one-seventh of (60—4). Let us avoid, as far as may be, all impressions which, once given, must at a later day be removed.

The question, (p. 48), "How many halves in any number?" is found in the midst of questions and statements like the following: One-half of 6 equals 3; what is one-half of 10 miles. The inference is that the question requires the answer, *two*. But on p. 134 we read, "How do you find how many halves there are in any whole number? Ans. Multiply the whole number by 2."

3. We object to the expression, "Only numbers of the same kind can be subtracted." As a test of its inaccuracy, we commend to the author's attention a comparison of his own definitions of subtraction and addition. The former is, "taking one number from another," we do *not* subtract *both*. The latter is, "counting two or more numbers of the same kind together," we *do* add two numbers.

4. Illogical language. In explaining (p. 95) the steps by which we take 279 from 800, the following language is used: "Since 9 cannot be taken from 0 units, and since there are *no tens*, we cannot take 1 from that order. Going on to the order of hundreds, take 1 hundred, and the minuend 800 is equal to 7 hundred, 9 tens and 10 units." Here, of the two reasons assigned for not "taking 1 from the second order," the former is utterly irrelevant. The change of "mode" in the second sentence appears unwarranted; while the "and" implies that if the steps indicated were not taken, "the minuend 800" might *not* equal 700 plus 90 plus 10! This entire paragraph should be rewritten.

Science for the School and Family. Part II, Chemistry. By WORTHINGTON HOOKER, M. D. Second Edition, Revised and corrected. HARPER & BRO'S., N. Y., 1876.

DR. HOOKER's chemistry published in 1863, has been thoroughly revised, several of the chapters entirely re-written, and much valuable matter added. Prof. BOLTON, of the School of Mines, Columbia College, has done his work well in this new edition. While he has constantly made use of the new nomenclature and chemical formulæ, he has not obliterated the pleasant, familiar style of the author.

The philosophy of chemistry is treated from the modern stand point, and the facts are the latest known to the science. There is much to commend, both in the matter and in the style. The arrangement of subjects seems to us not in the best manner. All the *generalising* is given in the first chapters, and the *facts* are given afterwards. An ambiguous statement occasionally occurs which might trouble the student: P. 118, "and secondly because it, (hydrogen) retains its lightness, while the heated air becomes heavy by being cooled." P. 119, "The lightness and combustibility of hydrogen may both be very prettily exhibited by having a tobacco-pipe, etc., attached to the stop-cock." P. 165, "It was formerly supposed that oxygen is the sole supporter of combustion—but we have an example to the contrary in chlorine." P. 206, "These metals have so great an attraction for oxygen that they are never found *native*"—instead of never found free in nature.

The book is a good one—valuable to the student or the general reader—but we are strongly inclined to the belief that for the former, *fewer words* would be better. If the 430 pp. could be condensed to 250 or 300 pp., the volume would be a better text-book. The illustrations, paper, type and binding are first-class in every respect.

Addresses and Journal of Proceedings of the National Educational Association; Session of 1875, at Minneapolis, Minnesota. 195 pp.

No teacher who means to keep abreast of the progress of thought and action in his profession, can afford to be destitute of this volume. Young, country teachers especially would be vastly profited if they would buy and carefully read these papers and the reports of the discussions upon them. The book is well printed, and substantially bound in muslin. Copies may be obtained of W. D. HENKLE, Salem, Ohio, by remitting to him, at the following rates, postage prepaid: One (1) copy, \$1.75; five (5) copies, \$8.00; ten (10) copies, \$15.00; fifteen (15) copies, \$21.00; twenty (20) copies, \$26.00; twenty-five (25) copies, \$30.00.

PERSONAL.

J. H. FREEMAN, is managing the Streater High School. He will return to his old position at Polo next year. We gladly welcome him to our ranks again.

CHARLES L. HOWARD, of the Normal class of '76, succeeds H. C. Cox, at Farmington.

H. B. NORTON, formerly of the Emporia, Kas., Normal School, is instructing the incipient schoolma'ams and schoolmasters of California, in the San Jose Normal.

HENRY C. COX, of Farmington, can be obtained to assist in Institute work during the summer. His terms are thirty dollars a week. He is a teacher of eleven years' successful experience.

JOHN T. LONG, is elected for the fourth time to the principalship of the Warsaw schools.

J. K. FAILING takes charge of the Vermilion, Edgar county, schools next year. C. W. JACOBS remains at Kansas.

BUSINESS ITEMS.

If you want a good ink for school use, one that will not corrode the pen, get thick, nor be injured by freezing, use MAXWELL'S Violet Ink, put up in five-gallon cans; price, \$6.25 per can. Any thing in the book and stationery line will be supplied to teachers at a reduced price. We make a specialty of filling all orders intrusted to us. If not in stock, we will procure and forward as soon as possible. If you want catalogues write us. If you are in want of a rare book that you have been trying without success to procure, try us. BANCROFT'S History of the United States, Centennial edition is to be complete in six volumes: volume three is now ready; price, \$2.25 per volume. MAXWELL & Co., Bloomington, Illinois.

The beautiful lithograph of the Normal and its surroundings, mentioned in the April SCHOOLMASTER, can be obtained at \$1.10, (the previous statement was an error.) Every old normalite should have one. Address, T. J. HOWELL, Lakeside Building, Chicago.

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ILLINOIS TEACHER,
Volume XXII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

JULY, 1876.

NUMBER 98.

PARTIAL STUDIES.

Teachers are often importuned by parents to excuse children from a part of the studies of the course. Various reasons are assigned. One needs more time for music; another has delicate health; a third so dislikes physiology; a fourth has a similiar antipathy to botany or zoology; others regard Latin, grammar, history, algebra, etc., as the case may be, as quite useless or unimportant studies, and think it hard that they should be required to pursue branches so irksome or valueless. Father or mother, therefore,—sometimes both—gives the teachers little peace till the objectionable study is laid aside. Every school in the country contains quite a large per centage of pupils, especially in the higher grades, that take but part of the prescribed course.

We believe this is not wise. We believe that the number of "partial-course" pupils should be greatly reduced, and that parents, were they better acquainted with the facts, would make many less requests to have their children excused from a part of the prescribed work.

Of course in every class are found a very few who lack the mental power to carry full studies. These should be excused from a part, but held to a strict account for the rest.

Again, there is now and then one whose health is unequal to the mastery of full studies. It is better that such take only one or two, rather than leave school.

Most requests, however, to excuse pupils on account of ill health are uncalled for. Their health is good enough to take all the studies, or would be if they would take care of it in other respects. All requests to be excused on the ground that studies are useless or unimportant are uncalled for. There are no useless, unimportant studies in the schools. More attention is often given to some than their relative importance demands: but none are

useless or unimportant. We believe at least three-fourths of the requests to have pupils excused from part of the school work ought not to be made; that at least this proportion of pupils excused suffer positive injury thereby. More suffer in body and mind from studying too little than from studying too much. If we were asked for a prescription that should work most effectually the demoralization of a school girl, we would say, "Get her excused from some study of the course." In rare instances pupils take a part of the studies and do good work; but for every such one there are at least a score who, from lack of enough to do, become careless, indifferent, demoralized, gaining little profit to themselves, and becoming stumbling blocks to others.

In the B class of a high school, for the month of September, four pupils had partial studies, and those four held lowest rank in the class of twenty-three members.

In the C class of the same school eight pupils had partial studies; six of these stood among the lowest in the class, while the remaining two owe their escape, we believe, to the fact that they have but recently been coaxed into the partial list, and hence have not had quite time enough to become demoralized, though one of them is making rapid progress in that direction.

The above figures seem to us significant. They teach a lesson that parents may well learn, to make them more thoughtful and judicious; a lesson, too, that teachers may well heed, to make them more earnest and faithful in dissuading parent and pupil from what will work only evil to the latter.

It may seem strange at first that so very large a proportion of "partial-study" pupils are among the lowest in their classes. But when we think on the subject it is just what should be expected. Lessons are assigned for those taking full studies. The pupil, then, who takes only two of three studies, or three of four, gets but two-thirds or three-fourths of the mental discipline received by his classmate who takes all, and consequently grows relatively weaker every day, even though he prepare these lessons as faithfully as his classmate. But experience shows that he does not do this. For having spare time on his hands he falls into the habit of putting off the preparation of his lesson, till there is not time enough left to prepare it as it should be. Then the spare time is generally spent in some frivolous, dissipating amusement, that tends to unfit him for study when he tries to apply himself. The result is, that in a short time after dropping a study, he prepares the remaining ones less carefully than when he had the full number; and the chances are several to one that in a year—often much sooner—his attention will become so withdrawn from school, so distracted by outside

influences, that he will drop out of school with half-completed education—a victim to undue tenderness of the parent, and too weak resistance of the teacher.

It is the uniform testimony of school superintendents that, as a rule, pupils who get excused from part of their class work, suffer in scholarship and in their interest in school from that time forward. Here is certainly an evil that calls for reform.

The notion, altogether too general, that the boys and girls in our schools study too hard, is an exceedingly foolish notion. There is little foundation of truth under it. Study is not injurious; it is healthful. It is not the mind occupied with worthy objects that suffers; it is the idle mind; or rather, the mind that is never idle, but which when not engaged on worthy objects must from its nature be busy with unworthy ones.

THOMAS H. CLARK.

ERRORS OF PRONUNCIATION.

It is possible that some one who reads the title of this article, says the *New England Journal of Education*, may find himself guilty of failing to pronounce the *ci* as *sh* in *shun*. I find that my lady friend, who is very precise in her language, will persist in accenting “*etiquette*” on the first instead of the last syllable. My good minister, who has the greatest aversion to anything wrong, was greatly surprised when I mildly suggested to him that “*aspirant*” should be accented on the penult, while my musical niece mortified me the other day by pronouncing “*finale*” in two syllables. I heard my geological friend explaining the “*subsidences*” of the earth’s crust, but he should have accented the second instead of the first syllable. The same mistake happened the other day to my friend, the President of the reform society, who spoke of the “*vagaries*” of certain people by accenting the first instead of the second syllable. He also announced that I would deliver an “*address*” that evening, but I knew it was not polite to tell him to accent the last syllable. My boy says he left school at “*recess*,” accenting the first syllable, and he was loth to believe that, whatever the meaning of the word, it should be accented on the final syllable. Then my friend, the President of the debating club, who is a great student of “*Cushing’s Manual*,” tells us that a motion to adjourn takes the “*precedence*,” by accenting the first instead of the second syllable. My other lady friend says that she lives in a house having a “*cupelow*.” She should consult the dictionary for that word. But I will close by remarking that my legal friend, who is very scholarly, always accents “*coadjutor*” on the second instead of the third, where it rightly belongs.

IN SCHOOL-DAYS.

Still sits the school-house by the road,
A ragged beggar sunning;
Around it still the sumachs grow,
The blackberry vines are running.

Within, the master's desk is seen,
Deep scarred by raps official;
The warping floor, the battered seats,
The jack-knife's carved initial;

The charcoal frescoes on its wall;
The door's worn sill, betraying
The feet that, creeping slow to school,
Went storming out to playing!

Long years ago a winter sun
Shown over it at setting.
Lit up its western window-panes
And low eaves' icy fretting;

It touched the golden, tangled curls,
And brown eyes full of grieving,
Of one who still her steps delayed
When all the school were leaving.

For near her stood the little boy
Her childish favor singled;
His cap pulled low upon a face
Where pride and shame were mingled.

Pushing with restless feet the snow
To right and left, he lingered;
As restlessly her tiny hands
The blue-checked apron fingered.

He saw her lift her eyes; he felt
The soft hand's light caressing,
And heard the trembling of her voice,
As if a fault confessing.

"I'm sorry that I spelt the word;
I hate to go above you.
Because"—the brown eyes lower fell—
"Because, you see, I love you!"

Still memory to a gray-haired man
That sweet child-face is showing—
Dear girl! the grasses on her grave
Have forty years been growing.

He lives to learn, in life's hard school,
How few who pass above him
Lament their triumph and his loss,
Like her, because they love him.

J. G. WHITTIER.

SCHOOL MACHINERY.

A school is not an army. The individual soldier is of little consequence. He must sink his individuality and become part of a machine. The machine is the unit. It is efficient in proportion to the fidelity with which it can obey the will of its leader. He must plan and command. "Theirs but to do and die." Of course, the "thinking bayonet" is the more irresistible. An Iliad in every knapsack has more than poetic significance. Literal obedience is an intellectual process.

The invincible hosts of KAISER WILLIAM were the best commentary upon German popular education. But the schools of a monarchy will graduate poor republicans. An *American* school is not an army.

There is a charm in "the measured tread of grenadiers." The evolutions of a trained regiment thrill the beholders. But the same accuracy of step, the same precision and uniformity of movement in a school may but betray its extreme inefficiency.

Here the former conditions are reversed. The school is for the children, for every one of them. Individuality must be encouraged, not repressed. The collective noun is here the poorest part of speech.

The school is for the children. The worth of every exercise must be brought to this tribunal for judgment. They are not here to learn to march and counter-march; they have sterner duties than those of the parade ground. Their work is with the prosaic multiplication table, the geography, the grammar, the reader.

Too many schools waste upon machinery enough time and vitality to master the troublesome "R's." Beginners are in greatest peril of keeping their pupils under the tap of a bell. The duty of the teacher is to instruct her pupils, not to marshal them. Her energy should be expended upon the recitation, and anything which lessens her strength for that exercise so far interferes with the true work of the schools. The graded school, with its crowded rooms and immense building, seems to require military discipline. The teacher taps the bell, and all are expected to turn. Some thoughtless little fellow is a second late. "Position!" says the teacher in an imperious tone, and back to their former positions go the hopefuls. Another tap, and twenty pairs of feet are in order in the aisle. Another, and twenty little bodies stand erect. Still another, and twenty miniature soldiers march with stately tread to the recitation room or bench. "How orderly!" ejaculates the wondering visitor. "What a waste of time," sighs the thoughtful critic. Imagine a preacher "counting out" his congregation!

If the pupils are wanted in the recitation room, why not tell them to go there, and let them learn the art of passing promptly without the dogmatical "right," "left," of the orderly sergeant?

In some graded schools, that have fallen under my observation, a system of records is insisted upon, that occasions more weariness to the teachers in charge than a full third of their legitimate teaching duties. Each instructor is armed with class-book and pencil, and the little six-year-olds stand in mortal dread of a daily zero, or are incited by the fond hope of a generous ten. We have no quarrel with the daily class-book in the high school, but there is better occupation for teachers in the lower grades. No little time and thought are needed to make correct estimates, and the effect can but be to waste valuable time, to suppress enthusiasm, and to fritter away the strength needed for *teaching*. Super-add to this the monthly average and you have Ossa on Pelion.

In too many graded schools there is so much machinery connected with the disciplining of slightly refractory pupils that the violations of the most trivial rules require the attention of the principal in charge. The grade principals are hedged in at every turn. They are bound hand and foot by red tape. A boy is a trifle disorderly. The exercises are abruptly stopped. A note, written in the most approved style, detailing John's offences all and singular, is put into his hands, and he is sent into the august presence of the "superintendent." Three or four similar delinquents are before him, and he enjoys a quarter holiday for his mischief. The loss of time is not the worst feature of such a system. The teacher finds no play for her individuality, and her personal influence, which should constitute her chief excellence, is felt less than that of the occasional lecturer to the university class.

The self-reporting epidemic has seized some localities. Before the regular recitation is begun, each individual member of the class is interrogated as to whether he knows his lesson, how much time he has devoted to its preparation, how many times he has read the reading lesson, how many problems he has performed, etc., etc. Omitting the moral question involved, it may occur to the ordinary mind that the recitation should enable the teacher to answer these questions herself and without loss of precious time. Neither are the pupils competent judges of whether they have mastered their tasks, and any credits based upon such reports must be, of necessity, very untrustworthy.

But why prolong the unprofitable list! Some machinery is necessary, but it should be reduced to the minimum, and the fact, seemingly unpalatable to many, that the success of the school is measured by the amount and

quality of teaching the branches in the course of study, should never be forgotten. Of course rudeness and bad conduct generally must be prohibited, but that is not accomplished most successfully by machinery. Discipline, moreover, becomes less difficult when the pupils have plenty of legitimate school-room work to engage their attention. J.

MORE FREQUENT ADMISSIONS.

Many of the causes of the early withdrawal of pupils from our schools are beyond the control of the school boards, and if any remedy is to be applied in these cases, it must be sought for at other hands. Such causes are the straitened circumstances of parents, ill health, removal from the city, indifference of both pupils and parents, mental incapacity to do the work of the school, and a desire on the part of the boys especially, to leave school and engage in business. But those causes which are traceable to the working of the school system itself are within the legitimate control of the school authorities, and for the removal of such causes, so far as possible, these authorities may justly be held responsible. One of the most fruitful sources of this evil in our High Schools is, in my opinion, to be found in the practice of admitting to those schools but once a year. This works badly in various ways. In the first place it causes the standard of admission to be lowered. As the pupil must either be allowed to pass to the High School upon his examination, or be obliged to go over again the work of an entire year, it is but natural, and perhaps just, that he should be refused promotion only upon the most satisfactory evidence of failure; whereas if another opportunity awaited him in a few months, the hardship of failure would be greatly diminished, and the propriety and justice of insisting upon a higher standard of admission would be apparent to all. It should also be borne in mind that a much larger proportion of those who fail in their examinations drop out of the schools altogether under the system of annual promotions.

Again, after the class has been admitted, what follows? Our entering classes number over two hundred pupils. Among these may be found a wide diversity of mental peculiarities. Some are bright, quick, and ready; others are slow and plodding, but faithful; some are studious and ambitious; others are idle and indifferent. Now, that school best fulfills its function which is most successful in giving to each one of such a mass of pupils an opportunity to do for himself the best possible. It may not be practicable to accomplish this perfectly, for where any considerable number of pupils

are brought together into a school, classification and organization are necessary ; but no system should be tolerated which needlessly throws obstacles in the way of reaching this end. Where classes are formed but once a year, to what extent is it possible to meet the various needs of these pupils ? A portion of any class entering the school could, without unreasonable effort, do even more than the amount prescribed for the year's work ; another portion would find their energies sufficiently taxed to complete the course for the year ; while still another portion cannot do what is required of them. Hence the brighter pupils must be held in check in order that their progress may be adjusted to the average of the class ; the slow and plodding ones, who, with a fair opportunity, not unfrequently turn out the best in the end, find no such opportunity offered them. They are pushed beyond their powers, and sooner or latter they drop out. The dull and indifferent are spurred to their utmost in order to make them do what for them is an impossibility, namely, keep pace with their more favored and more ambitious classmates. But all of them, the good, bad, and indifferent, the quick and the slow, alike, must be taken over the entire course for the year, and all brought out at the same point at the annual examination in June. The result is that many of the lower half of the class discover before the close of the year that they cannot complete the course, and they withdraw from the school : many hold on their weary way through the year, knowing that failure awaits them at the end, and that if they remain they must pass over again the same work the next year. They grow disheartened and careless, and from them comes the disorderly and disorganizing element which furnishes nearly all the cases of discipline that arise in the school. Not a few of these pupils are from poor families where heavy sacrifices have been made in order to secure an education for the children, and with them the loss of time is not a light matter. Is such a system necessary, or wise, or just ? Can any argument short of absolute necessity justify its maintenance ? If the interval between the classes in our schools were so small that the brighter pupils could easily be promoted to a higher class whenever it should be found advisable to do so, and the slower and duller pupils could be remitted to a lower class without serious loss of time, the whole difficulty would be removed. What the best interests of the school require is that our one large entering class a year be broken up into three or four entering classes admitted at as many different times. If this cannot yet be done, then let classes be admitted semi-annually, a plan that is entirely feasible, and that would greatly relieve the iron rigidity of our system.

The necessity of more frequent promotions in order to give greater elasticity to the school systems of our large cities has, within the last few years,

been widely and fully discussed by the leading educational men of the country, and in several cities the plan has been adopted with the best results. In a paper read before the National Educational Association at Detroit last summer, the Hon. E. E. White, of this State says: "It is believed by many experienced superintendents and other intelligent observers that the universal experience of graded schools condemns the prevalent practice of promoting pupils but once a year, with a year's interval between the classes. This wide interval is a serious obstacle in the way of a needed reclassification of pupils. The more capable pupils cannot be transferred to a higher class since this obliges them to go over the ground of two years in one,—a task successfully performed by very few pupils—and the less advanced pupils cannot be put back into a lower class without serious loss in time and ambition, if they are not withdrawn from school. It may be well for a few pupils in any system of graded schools to spend an entire year in reviewing the previous year's work, but these exceptional cases are usually the result of an attempt to hold pupils too long together. Large classes of young pupils cannot be kept together even for one year without serious loss, both to those who are held back and to those who are unduly hurried. What is needed is a system of classification and promotion that shall provide for the breaking of classes at least twice a year, with a transfer of more advanced pupils, and their union with the less advanced pupils of the next higher class, and also with special transfers of bright pupils from class to class as often as may be necessary, and special provision for pupils deficient in some branch of study. It is undoubtedly true that the procrustean system which puts pupils in classes, reduces them to the same capacity, and moves them regularly and evenly forward, requires little skill or trouble to run it, but this cannot compensate for the serious losses involved. The highest good of pupils ought never to be sacrificed to secure a self-adjusting mechanism and uniformity of results." The able superintendent of the St. Louis schools, who has given much thought to this subject, and has introduced the system of frequent promotions into the schools of that city, says: "Annual examinations for promotions, and the discontinuance of promotions at other times is an extremely pernicious system, and occasions early withdrawal from school more than any other cause. It is evident that the farther advanced the pupil, the more unfavorably will it affect him; and yet, in our schools throughout the country, the system is so arranged that this procrustean device applies more especially to the advanced pupils. In how many of our cities is there promotion to the High School oftener than once per year? What becomes of the pupils who lack one per centum of making the stand-

ard required? Are they not sent over the work of the highest grade of the grammar schools again, and thus made to occupy a year in doing what they might do in one-fourth of that time? And do they not leave school at this crisis more than at any other time in the whole course? Are not our High Schools arranged in grades or classes just one year apart in their work? And is all this necessary? Not, certainly, where there are pupils enough to make two or more divisions of thirty pupils each.”—*E. W. Coy’s report to the Union Board of High Schools, Cincinnati.*

MIND YOUR PAUSES.

“A country schoolmaster, who found it rather difficult to make his pupils observe the difference in reading between a comma and a full-point, adopted a plan of his own, which, he flattered himself, would make them proficient in the art of punctuation; thus, in reading, when they came to a comma, they were to say *tick*, and read on to a semicolon, and say *tick, tick*, to a colon, and say *tick, tick, tick*, and when a full point, *tick, tick, tick, tick*. Now it so happened that the worthy Dominie received notice that the parish minister was to pay a visit of examination to his school; and, as he was desirous that his pupils should show to the best advantage, he gave them an extra drill the day before the examination. ‘Now,’ said he, addressing his pupils, ‘when you read before the minister to-morrow, you may leave out the *ticks*, though you must think them as you go along, for the sake of elocution.’ So far, so good. Next day came, and with it the minister, ushered into the school-room by the Dominie, who, with smiles and bows, hoped that the training of the scholars would meet his approval. Now it so happened that the first boy called up by the minister had been absent the preceding day, and, in the hurry, the master had forgotten to give him his instructions how to act. The minister asked the boy to read a chapter in the Old Testament, which he pointed out. The boy complied, and in his best accent began to read: ‘And the Lord spake unto Moses, saying *tick*, Speak unto the children of Israel, saying *tick, tick*, and thus shalt thou say unto them *tick, tick, tick, tick*.’ This unfortunate sally, in his own style, acted like a shower-bath on the poor Dominie, whilst the minister and his friends almost died of laughter.”—*Northend.*

COMPOSITIONS.

Doubtless the design of school compositions should be mainly, if not entirely, the acquisition of correct forms of expression, and of the correct use of terms. "Writing Compositions" does not *per se* enlarge the sphere of the pupil's ideas; although, if one includes compilation under the head of composition, the searching of cyclopædias, gazetteers, etc., for information, undoubtedly broadens the pupil's mental vision, so far at least as facts are concerned. As indicative of what may be accomplished in a very simple way, the writer herewith suggests a plan which he has used with very excellent results. The first exercise in written spelling, this term, comprised the following words: *Precisely, traceable, combatant, committee, buzzing, thereupon, Wednesday, aborigines, seraphim, perceivable, responsible, prejudice, expansion, supervene, posthumous, obituary, herbaceous, foreclosure, saturate, conciliate, excursive, insignia, artificial, necessity, barometer.*

After the spelling exercise was finished, arrangements were made for the first composition as follows: Each pupil was allowed to select his own subject and was to be subjected, in his further work, to the following conditions:

1. The words of the spelling lesson were to be introduced and properly used.
2. They were to be introduced in the exact form in which they appear in the lesson, and also in the same order.

At the time appointed for the exercise, the compositions were publicly read by the teacher, while the pupils, pencil in hand, made notes as the basis of criticisms upon the several performances, which criticisms were in order immediately after the reading of each paper. In the present list, it was found that the words *expansion, supervene, herbaceous, foreclosure, and insignia*, perhaps, occasioned the most difficulty. If it is deemed by any reader that the task here indicated is too trivial for school-work, let him write half a dozen different sentences on different topics in which these words shall occur in regular sequence, and in strict accordance with good usage, and the time required shall be the test of the magnitude of the undertaking. Only by the construction of sentences, can the pupil communicate his idea of the use of words. When my Latin purist uses *supervene* as synonymous with *overcome*, he evinces more study than thought, more use of dictionary than general reading. One of the most beneficial results of this exercise is that the better class of scholars will soon be brought to the conclusion that

they are not to depend implicitly upon either dictionary or etymology for information as to the proper and accepted use of an unfamiliar word, but that, after familiarizing themselves with both *etymon* and dictionary, they are then rather to draw upon the stores of their own minds, enriched, as they should be, by constant reading of the writers of our present English.

The first composition read, and taken at random from the entire number, is herewith submitted to the readers of the SCHOOLMASTER. The presence of some errors is only indicative of the fact that no pruning or alteration has been attempted, as, in truth, the original manuscript goes to the editor.

O. S. W.

Chicago, May, 1876.

THE SETTLEMENT OF PRAIRIE RONDE.

It is not necessary for our purpose to date *precisely* the advent of the earliest settler of Kalamazoo County. In all the early history of that county, the fact is easily *traceable* that the white man and the Indian were each a *combatant* for the occupancy of the soil.

As step by step the white man had encroached upon the hunting grounds of the red man, a *committee* was appointed, consisting of both red men and white, by which the great Michigan reserve was adjudged to the Indians. There was therefore a great *bussing* of discontent among the Indians when the emigrants from New England began to look with longing eyes upon the rich fields of Prairie Ronde.

THEREUPON, on a certain *Wednesday*, the Pottawattamies, who were the *Aborigines* of that district, assembled together and made their Sagamore solemnly pledge himself never to part with those lands. Without pretending that the savage red men are either *seraphim* or cherubim or even angels of virtue, a certain confidence in their Sagamores is already *perceivable* in their history. The white man's own treachery is in a good degree *responsible* for the existing *prejudice* on the subject of the Indian's utter lack of truth.

The natural *expansion* of trade in the western settlements *supervened* to the attractiveness of the beautiful prairie land to urge the settlers to a breach of the pledge by fair means or by foul. It is to the misfortune of savage tribes that their histories are necessarily *posthumous* histories, their *obituary* written by their conquerors. The roses and the strawberries nature scattered so bountifully over those *herbaceous* fields served but as the incentive to the *foreclosure* of the mortgage held by the hand of the avaricious white man.

The white men invite poor Sagamore Sogamaw to feast, *saturate* him with fire water, and with friendly and flattering words *conciliate* him till he signs away his broad hunting grounds. Then the poor banished tribes begin again their *excursive* westward way; but not till, as punishment for his treachery, they had draped Sagamore Sogamaw in the sad *insignia* of death.

The red men own those fields no more, but an *artificial* society, which makes luxury a *necessity*, has succeeded; a society not regulated by the eternal principles of truth and justice, but by the changeable *barometer* of public opinion.

SOME HINTS FOR YOUNG TEACHERS.

A few years ago, when that pioneer worker of Southern Illinois, "Father" Roots, was county superintendent, he was accustomed to address an occasional letter to his teachers through the papers of his county. We copy a portion of one of these articles.—(Editor.)

Every child upon his entrance into school should be furnished with slate and pencil, and should use them a large share of the time. A drawing-slate is very useful, and every parent to whom fifty cents is not a heavy tax, would do well to supply his child with a writing and drawing slate. They are prepared especially for children and are of great benefit; but most children get along satisfactorily with a fifteen-cent slate.

The "word method" of teaching reading is adopted in all schools where teachers have been well trained to their work.

First, the child learns the name of the word, and is trained in expressing its meaning. Second, he learns the separate sounds that he utters in speaking the word, and becomes able to spell the words phonetically. At some subsequent time he learns the names of the letters. Every new word that he learns to know by sight he should put upon his slate. A child should never read or spell a word and leave the sentence containing it until he understands its meaning, and can put it into another sentence orally.

Primary cards are very important. No teacher can get her class along more than half as fast without as with them.

The mind, as well as the body, demands variety in its diet. Instruction in arithmetic should begin with the commencement of the child's school life. By the time he has finished the First Reader, he should be able to add any two numbers less than ten, to subtract the less from the greater, and to find the product of any two numbers less than six, and divide that product by either of its factors. They should be able to do this orally, and upon their slates. While it is well to do some oral spelling, most of it should be done upon the slates.

The answer to every question should be a complete proposition. In reciting geography, whenever a pupil gives the name of a place, he should show its location upon the map. Most of the schools are supplied with outline maps. Where they are not found, the districts will readily supply them if the teacher realized, and properly represented, the necessity of having them. For eleven dollars, and perhaps less, can be had a set of outline maps, of primary charts, and a numerical frame, all of which every district should have. When the pupils have finished the First Reader, they should be able to give names of twenty states, show location on the map, and tell direction from Illinois.

When I visit your schools, I shall take a memorandum of the following: Number of pupils that have dictionaries; number that can write legibly; number that can write a letter in proper form; number that have the arithmetic and geography up to the above standard with their reading; the number that can give the substance, in their own words, of each paragraph read by them.

REFORMED METHOD OF STUDYING HISTORY.

BARNES, the schoolmaster in a suburban town, read in the *Educational Monthly* that boys could be taught history better than in any other way by letting each boy in the class represent some historical character, and relate the acts of that character as if he had done them himself. This struck BARNES as a mighty good idea, and he resolved to try it on. The school had then progressed so far in its study of the history of Rome as the Punic wars, and Mr. BARNES immediately divided the boys into two parties, one Romans and the other Carthagenians, and certain of the boys were named after the leaders upon both sides. All the boys thought it was a big thing, and BARNES noticed that they were so anxious to get to the history lesson that they could hardly say their other lessons properly.

When the time came, BARNES ranged the Romans upon one side of the room and the Carthagenians on the other. The recitation was very spirited, each party telling about its deeds with extraordinary unction. After a while BARNES asked a Roman to describe the battle of Cannæ, whereupon the Romans heaved their copies of "WAYLAND'S Moral Science" at the enemy. Then the Carthagenians made a battering-ram out of a bench and jammed it among the Romans, who retaliated with a volley of books, slates and chewed paper balls. BARNES concluded that the battle of Cannæ had been sufficiently illustrated, and he tried to stop it; but the warriors considered it too good a thing to let drop, and accordingly the Carthagenians sailed over to the Romans with another battering-ram, and thumped a couple of them in the stomach.

Then the Romans turned in, and the fight became general. A Carthaginian would grasp a Roman by the hair, and hustle him around over the desks in a manner that was simply frightful to behold, and a Roman would give a fiendish whoop and knock a Carthaginian over the head with GREEN-LEAF'S arithmetic. HANNIBAL got the head of SCIPIO AFRICANUS under his arm, and SCIPIO, in his efforts to break away, stumbled, and the two

generals fell, and had a rough-and-tumble fight under the blackboard. CAIUS GRACCHUS tackled HAMILCAR with a ruler, and the latter, in his struggles to get loose, fell against the stove and knocked down about thirty feet of stove-pipe. Thereupon the Romans made a grand rally, and in five minutes they ran the entire Carthaginian army out of the schoolroom, and BARNES along with it, and then they locked the door and began to hunt up the apples and lunch in the desks of the enemy.

After consuming the supplies, they went to the windows and made disagreeable remarks to the Carthaginians who were standing in the yard, and dared old BARNES to bring the foe once more into battle array. Then BARNES went for a policeman, and when he knocked at the door it was opened, and all the Romans were found busy studying their lessons. When BARNES came in with the defeated troops, he went for SCIPIO AFRICANUS, and, pulling him out of his seat by the ear, he thrashed that great military genius with a rattan until SCIPIO began to cry, whereupon BARNES dropped him and began to paddle CAIUS GRACCHUS. Then things settled down in the old way, and next morning BARNES announced that history in the future would be studied as it always had been; and he wrote a note to the *Educational Monthly* to say that, in his opinion, the man who suggested the new system ought to be led out and shot. The boys do not now take as much interest in Roman history as they did on that day.—*Philadelphia Bulletin*.

COURSE OF STUDY FOR THE COUNTRY SCHOOLS OF BOONE COUNTY.

FOURTH GRADE—6 TO 8 YEARS, ORDINARILY.

Reading.—First Reader. Teach, first, words, then sounds, and finally letters. Sounds of five long vowels with marks.

Writing.—Teach pupils to write and print, on slates, their own names and all words learned. Drawing, lines and angles.

Spelling.—Spell orally and by sound all words read.

Arithmetic.—Count, read and write to 1,000. Roman numerals to C. Add mentally, and on slate, single columns to 100. Addition and subtraction tables.

Language.—Correct errors in talking. Formation of full sentences, oral or written. Talks on common objects, form, color, size. Name visible parts of the human body.

Object.—Lessons upon leaves, flowers, domestic animals, clouds, etc.

THIRD GRADE—8 TO 10 YEARS.

Reading.—Second Reader. Do not leave a sentence until well read. Give short lessons. Talk about the subject until pupils comprehend the thought expressed.

Writing.—Write reading lessons; also spelling, language and object lessons. Analysis of small letters.

Spelling.—Oral and written; all words read. Use Speller.

Arithmetic.—Read and write numbers to 1,000,000. Roman Numerals completed. Mental and written work in addition, subtraction, multiplication. Have good analysis; quick and correct work; tables written and oral.

Language.—Require correct expressions in recitation and conversation. Have exercises in letter-writing.

Stories.—Descriptions of objects and events.

Geography.—Oral. Draw school-house, township, county and state.

Object.—Three kingdoms of nature; growth and use of fruits; birds, and uses of animals.

Laws of Health.

SECOND GRADE—10 TO 12 YEARS.

Reading.—Third and Fourth Readers. Secure good expression. Assign advance and review lessons. Pupils use dictionary for definitions and pronunciation. Avoid drawing and monotonous tones.

Writing.—Use copy-books. Continue to write lessons on slates.

Spelling.—Oral and written—all words, in all studies, likely to be misspelled. Frequent DRILL.

Arithmetic—All fundamental rules. U. S. money; l. c. m. and g. c. d.; common fractions; mental arithmetic.

Grammar.—Analysis of sentence. Define subject and predicate. Point out elements and parts of speech. Correct errors in speech.

Geography.—Boundaries of the continents. Locate political divisions of N. A. and U. S. Mountains and river systems. Draw states; locate two important cities for each, and name productions.

Nat. Science and Physiology.—Oral and written work. Laws of health. Constant review.

FIRST GRADE—12 TO 14 YEARS.

Reading.—Complete Fourth Reader. Fifth. Use dictionary; define words and make sentences. Elocutionary drill.

Writing.—Use copy-book.

Spelling.—Oral and written. Use text-book.

Arithmetic.—Practical and mental. Give many examples from different text-books for application of principles. Require practical work.

Grammar.—Verbs. Parsing. Much composition work. Business forms.

Geography.—Completed. Review often. History U. S. discoveries; settlements, wars, administrations, etc.

Laws of Health.—Natural Sciences continued.

FORENOON PROGRAMME.

TIME.	MIN.	GRADE.	RECITATIONS.	STUDIES.
9 to 9.10	10		OPENING EXERCISES	
9.10 to 9.30	20	4	READING	{ 3-Writing Advance Reading Lesson. 2-Geography. 1-Geography or History.
9.30 to 9.50	20	3	READING	{ 4-Printing. 2-Geography. 1-Geography or History.
9.50 to 10.10	20	2	GEOGRAPHY.....	{ 4-Numbers. 3-Numbers.
10.10 to 10.30	20	1	{ GEOGRAPHY OR HISTORY.....	{ 1-Map-Drawing in Geog. or History. 4-Numbers. 3-Numbers.
10.30 to 10.45	15	..	RECESS.	{ 2-Map-Drawing.
10.45 to 11.00	15	4	NUMBERS	{ 3-Numbers. 2-Advance Reading, using Dictionary.
11.00 to 11.15	15	3	NUMBERS	{ 1-Grammar. 4-Drawing. [Lesson.
11.15 to 11.30	15	2	{ READING & ORAL GRAMMAR	{ 2-Grammar from Advance Reading 1-Grammar.
11.30 to 11.45	15	1	GRAMMAR	{ 4-Reading Review Lesson. 3-Drawing.
11.45 to 12.00	15	4	{ MISCELLANEOUS WRITING DRAWING SPELLING	{ 1-Grammar. 4-Writing Advance Review Lesson. 3-Reading Revised Lesson. 2-Arithmetic.

AFTERNOON PROGRAMME.

TIME.	MIN.	GRADE.	RECITATIONS.	STUDIES.
1.00 to 1.05	5		SINGING.	
1.05 to 1.25	20	4	READING.....	{ 3-Writing Advance Reading Lesson. 2-Arithmetic.
1.25 to 1.45	20	3	READING	{ 1-Arithmetic. 4-Numbers.
1.45 to 2.05	20	2	ARITHMETIC.....	{ 2-Arithmetic. 1-Arithmetic. 4-Review Spelling.
2.05 to 2.25	20	1	ARITHMETIC.....	{ 3-Numbers. 1-Arithmetic. 4-Writing Spelling Lesson.
2.25 to 2.40	15	..	RECESS.	{ 3-Language. 2-Dictionary Words and Spelling.
2.40 to 2.55	15	4	SPELLING & OBJECT.	{ 3-Writing, Spelling. 2-Reading Review Lesson.
2.55 to 3.10	15	3	LANGUAGE & SPELL'G	{ 1 Natural Sciences and Physiology. 4-Drawing.
3.10 to 3.25	15	2	READING & SPELL'G	{ 2-Writing Advance Reading Lesson. 1-Reading Review Lesson.
3.25 to 3.45	20	1	READING	{ 4-Reading Review Lesson. 3-Drawing.
3.45 to 4.00	15	.....	.....	{ 1-Reading Advance Lesson. 4-Writing Advance Reading Lesson. 3-Reading Review Lesson. [iology. 2-Assigned work in Science and Phys- 1-Physiology. 2-Natural Science. 3-Objects, Maps, etc. 4-Globes, Music, etc.

HINTS.

Review often. Be thorough. Answer no questions from the school during recitation. Pronounce words when you assign spelling-lessons to young pupils. Have order and system in all. Use signals in calling and dismissing classes. Talk little. Be energetic. Teach pupils to THINK. Ventilate the school-room and make it pleasant. Do not lose self-control.

Every teacher should have a programme of daily exercises, and in order to assist in the most difficult task, that of arranging daily work, I send you this sample programme.

From 9.10 to 9.30, while the fourth grade is reading, the third grade are writing their reading lesson, second grade are studying Geography, and first grade, studying Geography or History. M. E. CRARY, Co. Supt.

DIPLOMAS.

We have just passed through the season of the year when the diploma crop is harvested. Some affect to despise this fruit, but in many cases these persons are like Reynard at the time he concluded that the grapes were sour. Students generally have always prized these testimonials; and they ought to do so; for, if they are fairly won, they have to the student of our day something of the same significance that the laurel-wreath had to the victor in the Grecian games: they signify laudable effort, crowned with success. A larger field is devoted to the product of the diploma crop year by year, for our public High Schools and Academies, in addition to our Colleges and Seminaries, are more and more adopting the practice of regular graduation ceremonies and the bestowing of diplomas. This seems to be well enough, if only these ceremonies signify the actual mastery of a reasonable amount of literary and scientific work. But I feel like throwing out a few suggestions in respect to these occasions,—suggestions concerning possibilities for improvement. Of course, mere suggestions will be sufficient to effect reform here, as elsewhere.

Why can we not have some better name for these occasions, than that absurd word *Commencement*? When this name was first given in our old Colleges, there was some reason for it; but I do not understand that any reason exists now, even in those Colleges. Why not say *Graduation*? Even “Ending” would be better than “Commencement.”

Why must all the candidates wear a "regulation" dress? Would not a class look better if there were more variety? Besides, the cost of the prescribed dress, if expensive, as it often is, is a very grave affair to a poor student. Why not in this Centennial year of reforms, reform this foolishness altogether?

Cannot some better way of approving the efforts of the speakers be devised than by throwing great bunches of flowers at them, thereby endangering the bonnets of the audience, and covering the platform with *debris*? Besides, this custom imposes on some one the very undignified task of collecting the offerings from the floor. If bouquets are to be given, why not let ushers pass through the audience and collect them?

Why cannot the candidates be led to take some living topic and to treat it in their own way, without "reading up" on the subject and trying to display vast learning? The Greeks and Romans, Aristotle, Galileo, Newton and the Pilgrims must have a very uneasy time, if they know how persistently they are "trotted out," on these occasions. The applause which greets every one who departs from the beaten track with any show of success, ought to encourage more to try the experiment.

Why cannot the youthful speakers be trained to a clear, distinct, intelligent expression of what they have to say, without so much attempt at studied oratory? Attempts at elocutionary flights, accompanied with studied gesture, unless very well executed, are like attempts at ornamental flourishes with a pen, when made by a bungler.

Once more, is it not to be hoped that, in the good time coming, participation in these closing exercises shall be a certain indication that the participant has thoroughly, honestly and completely performed the entire amount of work laid down in the prescribed *curriculum* of studies? A cheap diploma must be very like a cheap piece of jewelry, or a cheap watch.

AN OLD BOY.

EDITORS' DEPARTMENT.

In many towns the people are very restive under the heavy burden of taxation. In such case, the school is apt to be the scapegoat upon which the sins are visited. In three or four towns that have come under our notice, the regular order is to be broken up for the purpose of saving one or two hundred dollars. Old and successful teachers, in whom the people have entire confidence, are to be removed to save thirty cents *per capita* on the

yearly tuition. The schools are to be remanded to the realm of experiment by putting at their heads beginners or inefficient. Is this economy? Many towns of seven hundred inhabitants now have schools that are equal in efficiency to those of the best cities. Destroy or impair their value and you have killed the only thing of which the village could justly be proud. Two hundred dollars represents, in many cases, the net profits of the year's work, for the teacher. With him it is every thing; with the town it is next to nothing. Directors should proceed with extreme caution when they propose to make radical changes in the management of their schools.

The city of Jacksonville has been considerably exercised, of late, over an attempt to destroy its high school. The old arguments are recited, and, are thought by some to be conclusive. One writer, with what Mr. WARD would carefully label "sarcasm," says: "Yes, teach the young ladies to play the piano; that is a desirable accomplishment. Teach them millinery: that will help the community," etc, etc. This argument, if followed to its conclusion, would destroy public schools of all grades, and it is usually advanced by those who are at heart the enemies of the public school.

At last accounts the high-school party were triumphant, as might be expected, and the schools go on as heretofore, with no material change in their condition.

Again the summer days are upon us, and the district school register shows that the little folks are in almost exclusive possession of the premises. In many localities, the teaching work has been remanded to those who are making their maiden effort. Their ideas of instructing have been derived almost exclusively from what they have observed in their own teachers, and are, consequently, crude and indefinite. THE SCHOOLMASTER would suggest a thing or two to such of them as may be readers of its pages.

There is danger that such may lose sight of the fact that the progress of the pupils depends upon the amount of genuine, sterling work that they perform. They do not catch culture as they do the measles,—by a slight exposure. A couple of ten-minute exercises morning and afternoon, and a nap between times, will not achieve results of which parents may be proud. Many of these schools will be small. The average attendance will not exceed twenty, and there are five or six good hours in every day for this score of little people to recite, play and study. Remember that no way of teaching children to read has been found to be half so effective as to keep them at it just as much as possible.

You have heard and read much, perhaps, of the "word method." You

do not know the principles involved and cannot trust yourselves to experiment. Then remember that you can, at least, make your pupils repeat their tasks again and again, and yet again, atoning for your lack of deftness by constant repetition. Much can be done by "main strength and awkwardness" Keep the children busy If they can recite a dozen times a day, by all means have them do it If they grow dull and sleepy between times, send them to the play-ground. Be sure that at least one person in the room is wide-awake and active. You are to receive a consideration for your services. Be sure that the results are such that the community shall not consider the money wasted. The little eyes are strangers to the printed words. Make them see them so frequently that they can't forget them. The arithmetical tables are to be learned. They must say them a *hundred* times, not five or six. Review constantly. Learning is much like making money. The start is the most difficult. When the snow ball is small it gathers slowly. Make sure of a few things

He is the best district-school teacher, other things being equal, who can make the children most proficient in the rudiments in the shortest time. If anybody must be neglected let it be the older ones.

We have said these common-place things because, from familiarity with our summer schools, we have found many of them next to worthless from the neglect to do the very things suggested above. To sum up all in a single sentence, we would say, "keep things humming."

What effect does teaching produce upon the teacher? He deals with persons far below him in maturity, scholarship and intellectual power. The greatest disparity, of course, is found in the primary room. Here, then, we should seek the characteristic marks of the profession.

In too many instances the teacher is found to acquire an unnaturalness—an affected manner. She accepts as axiomatic the statement that she must make the children love her, so she attunes her voice to sympathetic inflections, and schools herself to an indescribable gushiness of manner. The children are treated like hot-house plants of the most tender variety. Is it strange that she should carry into society a suspicious sweetness of style? Her laugh is perfunctory; it savors of gentle encouragement to the wits of her circle. When this stage of development has been reached, the patient should at once resign and submit herself to hygienic treatment before it is everlastingly too late. This condition indicates a lack of general culture, and a shallowness of character. The primary teacher has sore need of the best that books and society can give. Her manner should be simplicity and

naturalness personified. The best primary teacher we ever knew was a large-hearted, large-brained woman, whose sympathy for children was as natural as her breath. She was an inspiration to old and young that came within the charm of her presence. The vapid nothings, the silly baby-talk of too many homes and schools found no place within the walls of her room. Everything was healthful and natural. The boys became manly, and the girls womanly, under her gracious teaching. She passed out of this earth-life years ago, but who can measure the effect of her work? She approached the ideal in her profession, and the secret of her success seemed to be her genuineness. We argue, that, to the teacher of generous culture, of native fitness for her work, and of unaffected simplicity, no evil results will follow here more than in other professions.

The effect of the teacher's work upon himself will depend in great measure upon the disposition he makes of his time out of school hours. If he attempt nothing more than school recitations demand, he will probably become dogmatical and bigoted. If, on the other hand, he is constantly exploring some, to him, new field of study, he will find enough to keep him from an excess of pride over his attainments, and will be better able to sympathize with his pupils in their work. He can more readily put himself into their place.

The teacher should mingle familiarly with the people by whom he is surrounded. He will often find in his community those who are far his superiors in endowments, natural and acquired. He needs the stimulus that will come from such association. He will find himself among persons of less technical book-knowledge, but of more skill in their particular business than he possesses in his. He can learn useful lessons of all, and nothing can he learn that will make him more a man but will also make him more a teacher.

The Centennial is in full blast. The streets of the Quaker City are thronged with inhabitants of the four corners of the earth. Brother Jonathan is in his glory. If current reports may be relied upon, the exhibition is an unqualified success.

The teachers are of course anxious to learn how the Illinois Educational Department compares with that of other States. We are permitted to make the following extracts from a private letter written by S. H. WHITE, the superintendent of our exhibit :

In its character the exhibit is creditable to the teachers of the State. As a presentation of work actually done by pupils and students, it is not surpassed in its completeness and excellence when taken as a whole. In a single feature, others are

superior, as Massachusetts in art. No state has, by any means, so good an exhibit of its higher educational work as is made by our Industrial University, and I think that the work of the ungraded schools of the country districts is not represented by any so fully as by several of our county superintendents. Pennsylvania, in a building of her own, makes the best exposition of the American idea of education. With the advantage of being at home, she has been able to add to the results wrought out in the school room whatever else by way of furniture, apparatus, etc., would illustrate the condition of the educational work in this country. Her plan is comprehensive. It includes about every educational feature found in her borders. Her charitable institutions, including her deaf and dumb asylum, school for the blind, orphans' schools, her colleges, her normal schools and public schools of all grades, are all marshalled into a systematic order, so that, in passing through the walk around her building, one sees the different features of her system so arranged as to show at a glance their relation to each other. Much of historic interest is brought in. The whole is crowned by the exhibit of her State department from which an idea of the leading features of her system, its growth and extent can be readily gained. So much, as the result of intelligent, persistent, comprehensive and long-continued effort in the educational work of the State. While talking with Superintendent WICKERSHAM, who has occupied his present position ten years at least, we were introduced to three of his assistants, all of them the best men for their respective positions that could be found among the active school men of the State. The State seems to be guided in her educational work by the motto, "How much is necessary to make our educational institutions most efficient?" not, "How little is necessary to pay the expenses of the State department."

From a letter from Dr. GREGORY we quote the following:

"The general exhibition is grand and beautiful beyond all its predecessors. Sir CHARLES REED of England, whom we have made chairman of our section of judges, says that he has been to all, and that this excels all others."

He was a physician by profession and a schoolmaster by brevet. He fed pills and potions to the surrounding country during the sickly season, and when it was "distressingly healthy" he "kept the village school." He could glibly utter mysterious names of learned length, and it was confidentially whispered among the knowing ones that he was "very wise, sir." So, why should he not be a rare catch for the directors? True, a man who had taught a dozen terms successfully applied for the school, but the doctor could put him to shame in five minutes, and he retired discomfited.

THE SCHOOLMASTER happened to be in the village and was invited to drop in in the afternoon, when the "best class" was reciting. He meekly obeyed. Five or six young men, from sixteen to twenty, were discussing the mysteries of Compound Proportion. Enter SCHOOLMASTER.

Teacher. "Read problem sixteen, Walter." Walter obeyed.

Teacher. "How do you perform it?" (Long pause.) "You draw a long, horizontal line, don't you?" *Walter* (modestly) "Yes sir." *Teacher.* "What next?" (Long pause.) "You write 240 above the line, don't you?" *Walter.* (doubtfully) "Yes sir." *Teacher.* "What next?" (Longer pause.) "You write 18, 10 and 6 above the line, don't you?" *Walter.* (cautiously)

"Yes sir." *Teacher.* "And then you write 16 and 12 below the line, don't you?" *Walter.* (confidently) "Yes sir." *Teacher.* "And then cancelling and multiplying you have 135., don't you?" *Walter,* (triumphantly) "Yes sir;" and he gazed with admiration upon his teacher. "I knew you could do it" said the doctor. He told me that the class would finish the book that term, whereas, under the teacher of last winter they had gone less than half as far.

In how many districts in this goodly State are there idle doctors and decayed preachers taking the children "through the books," and admiring directors congratulating themselves that they have an "educated" man for their schoolmaster?

The value of general exercises in school is not appreciated by one teacher in ten. Eight minutes a day will keep the school comparatively well informed upon the important current events. We read that the work upon the Jetties is progressing finely. How many pupils have any clear idea of what the Jetties are, or how they are to deepen the Mississippi? Five minutes will make the whole matter clear to the dullest. Every teacher will find in his school pupils from fourteen to twenty, if he have persons of that age, who know not the name of the governor of their State, or what officers are quadrennially elected therein. There are hundreds of items of common interest that may be discussed advantageously. Some of the principals in town schools have been using the daily paper, and, we doubt not, with much profit to all concerned. We should be glad to hear a report of results.

These exercises can be made of most value in the district schools, however. The town children are constantly hearing the news of the day discussed, while their rural neighbors enjoy fewer advantages of that kind. This part of the day can be made so interesting that the children will ransack their homes or question their parents to prepare themselves upon some assigned topic. The subject is worthy a five-page article.

What a hankering after the town or city develops in the average farmer boy as he verges upon manhood! What rosy pictures of purple and fine linen, of clerkships and riches pass before his enraptured vision! Nor is it strange. How little he imagines that the gorgeous creature, who ornaments the inner side of the counter, has his riches upon his back! He has not dabbled in statistics, else would he know that nine merchants in every ten have only the ashes of a life which has been consumed by care and toil.

The fierce competition of the town develops sharpness and courage, but dulls the edge of fraternal feeling. It excites passion and greed, and leaves but few of the calm contents of life.

The city, of course, has its charms. Its opportunities for culture and rational enjoyment are many, and could they be combined in some measure with rural life, there would be little left to wish. But, only the rosy side is presented to the country boy, and he forms false estimates of its attractiveness, and thus loses in some sense his love for the quieter life of the farm.

Farmers as a class gradually grow rich. As a class they have more independence of character than men in the learned professions. The soil returns them a generous reward for their toil whatever people may think of their politics or religion. Few are the sleepless nights spent in devising plans to meet over-due bills. The political movements too, of late, tend to dignify their calling, and make them feel more sensibly than ever how potent a force they are in the affairs of the country.

It is the duty of teachers to do all in their power to preserve and increase the attractions of farm life. Teach the children to find in the companionship of books and nature something better than the busy throng can give. It is the solitary character of rural life that causes so many to desert it. The summers will take care of themselves, but the season when the work of the farm makes few demands hangs heavily. It is at that season, too, that the schoolmaster is abroad, and his duty is before him.

A writer, reporting on the recent examination of candidates for admission to West Point, makes the following statements :

A little more than one hundred reported, and thirty-seven were rejected by the Examining Board. In all these examinations of candidates, the branches in which the most deficiencies occur, are arithmetic, reading and spelling.

It is a significant fact that many of the candidates who have been rejected are graduates of high schools and colleges, men who considered themselves proficient in the common branches long ago. This seems to indicate a lack of thoroughness in the instruction in the elementary branches in our schools.

The last remark of this writer lays the fault just where it belongs, and contains a very pregnant hint for teachers and school boards. Will school-directors, teachers, and the general public ever learn that to be able to read well, to write a good hand, to construct properly English sentences, to spell their words correctly, and to be master of the principles and practice of the elements of arithmetic, constitute a good common-school education ? This is an education which thousands do not possess, even after they have gone through academy, college, and the professional school, and have studied the "osophies and ologies" for years. Is not the Centennial year a good year to begin a thorough reform in this particular ?

We have received the following letter from the President of the Peoria School Board, and we gladly give it a place in our columns. Comment is unnecessary.

EDITOR ILLINOIS SCHOOLMASTER, DEAR SIR :—In your June number, I notice a statement to the effect that some one in Aurora objects to the High School there because it is educating the children of the rich at the expense of the poor.

This is a question of fact, and can be easily ascertained. Indeed, it is a question of two facts : 1st, Whether or not the poor men in Aurora pay more taxes than the rich men ; and 2d, Whether or not the proportion of rich men's children in the High School, as compared with poor men's children, is greater than the proportion of taxes the rich men pay.

If, on the first supposition, the poor are paying the taxes in Aurora, and the rich escaping, then the so-called poor had better look into that matter first, and I venture to say that they will, on the least suspicion of it. But if, on the second supposition, the rich are taking more than their fair proportion of the benefits of the higher education in Aurora, then I think you will agree with me, that Aurora is to be congratulated on one thing at least,—that her rich men's sons and daughters are more sensible than the average of rich men's children.

The accompanying table, prepared by request in May of this year, will show how it is in our city.

Bearing in mind that, of the twenty merchants in the list, the greater number are simply small grocers, that lawyers and physicians very rarely accumulate much property until past middle life, and that of the twenty-five orphans or half orphans the greater number are studying to become teachers, you will find that at least five to one of the pupils in our High School are children of parents whom the Aurora critic would call poor ; that is, of very moderate means.

OCCUPATION OF PARENTS OF PUPILS IN THE HIGH SCHOOL, PEORIA, ILLINOIS,
MAY, 5TH, 1876.

Agents, 4; Builders, 3; Book-keepers, 10; Butcher, 1; Capitalists, 6; Coopers, 2; Collector, 1; Farmers, 6; Gardner, 1; Gauger, 1; Hucksters, 3; Journalist, 1; Laborers, 4; Lawyers, 5; Merchants, 20; Masons, 6; Miller, 1; Machinists, 8; Manufacturers, 4; Mail Agent, 1; City, County or State Officers, 4; Printers, 2; Plumber 1; Physicians, 2; Policeman, 1; R. R. Conductor, 1; R. R. Engineers, 2; Restaurant Keeper, 1; Shoemaker, 1; Tailor, 1; Tinner, 1; Retired, 1. Father not living, 25.
E. S. WILCOX.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

The Cook County Normal School, located at Englewood, has succeeded in attracting a good deal of attention recently. There is no doubt but that its teachers, or somebody else, have "aroused an interest" in it. An effort seems to be making to abolish BRO. WENTWORTH, and several very formidable lists of gentlemen who are willing, nay anxious, to take the vacant place now occupied by him, in that

event, have been published. A very suggestive feature of the case was developed at the meeting of the Cook County Principals' Association, Saturday, June 10th, 1876. A resolution endorsing Mr. WENTWORTH, and commending the work of the school under his charge, was introduced, and carried unanimously, according to the newspaper reports. The County Board of Education, consisting of 8 members, are reported to stand four in favor of Mr. WENTWORTH's re-election, and four against. There is some intimation that the above Board will solve the difficulty by the eminently *manly* and *patriotic* course of closing up the school altogether!

We regret to notice in several recent educational discussions and publications a resort to what may be called the argument of success. The thoughts of wise educational thinkers, and the theories, plans and recommendations evolved from years of intelligent experience have been flouted and ridiculed because, forsooth. Boards of Education had failed in some instances to appreciate or sustain either the plans or their authors. While the expediency of a theory is a legitimate subject for consideration, no conscientious educator will abdicate his high functions as a teacher and guide of the people by failing to recommend a course which his intelligent and experienced judgment approves, lest some one in the enjoyment of a little brief authority may not approve and support it. The argument of success is too much like a boomerang for these days of sudden political revolutions. There is no knowing how soon it may return to plague its inventors. Gentlemen, discuss educational questions on their merits, and not on the way this or that idiotic Board of Education has treated them.

The Executive Committee of the State Teachers' Association, consisting of Dr. ALLYN and Messrs. PARKER and HANFORD, held a meeting in Chicago June 1st, 1876. It was decided to devote two morning sessions of the Association to section exercises, and the committee earnestly invite teachers and all interested, to suggest subjects of discussion, and the names of persons who will discuss the same effectively. Suggestions for the High School and College section may be addressed to Rev. ROBT. ALLYN, D. D., at Carbondale; for the Intermediate and Grammar School sections to CHARLES I. PARKER, at Danville; for the Primary School section to F. HANFORD, 267 Oak Street, Chicago.

Some account was given in this department of the SCHOOLMASTER in the April number, of recent discussions, in the Principals' Association, of the "Oral Course." An attempt was made to give our readers an idea of the spirit and scope of that discussion, and reference was made to the statements, arguments and records of some of the speakers on this and kindred questions.

Mr. BAKER, of SKINNER SCHOOL, thinks that the reference made to him in these particulars was not fair—was indeed unjust. The SCHOOLMASTER would not knowingly be guilty of misrepresenting any one, and least of all, one whom he esteems so highly, both personally and professionally, as Mr. BAKER. The SCHOOLMASTER intimated, in the number referred to, that Mr. BAKER was to all intents and purposes the author of the Chicago Oral Course as revised in 1872. Mr. BAKER admits that he made the revision, as chairman of a committee, but urges that it was not the function of the committee to originate a course, but to rearrange matter already in the course. Mr. BAKER earnestly denies that any "new light" was received recently, and affirms that he has never approved of the "Oral Course." While the record would seem, therefore, to sustain the SCHOOLMASTER's statement, Mr. BAKER is entitled to his explanation.

Mr. BAKER protests that the SCHOOLMASTER missed the point of his argument in reference to the relations existing between "cramming" and "intellectual development," and while lamenting, with some natural sorrow, our confusion of his careful Socratic method with the arguments of some of his colleagues on that occasion, he strenuously denies that he ever urged that memorizing text-books constituted intellectual development. The SCHOOLMASTER cheerfully gives Mr. BAKER

the benefit of that denial, and gladly announces Mr. BAKER's unwillingness to be held responsible for the weak and unworthy arguments that were urged in that behalf by those with whom he was associated on that occasion.

Finally, Mr. BAKER complains that some rather light general remarks of the SCHOOLMASTER in reference to the necessity of certain aspects of the discussion, and the "common speech of people" in reference thereto, may give his readers an unfavorable and wrong impression of Mr. B's motives and character. If he thought there was any danger of creating this impression by what he said, the SCHOOLMASTER would never cease to regret his utterance. He had no thought of reflecting upon the character or impugning the motives of any principal. He had, and has, the highest regard for Mr. BAKER's character as a man, and attainments as a teacher. In the matter of the discussions in question, the SCHOOLMASTER differs very decidedly from Mr. BAKER, and sought to make the basis and reasons for that difference manifest, and to that end said what he did honestly, and without either malice or unfriendliness.

The June meeting of the Principals' Association was held at the rooms of the Board of Education, Saturday morning, June 3d, 1876. This was the last meeting of the school year, and attention was principally given to details of the Annual Examination for the admission to the High Schools. These details, though of considerable local importance, are not of much general interest. It may be noted, however, that contrary to the usual practice, the examinations will be held wholly in the several grammar schools instead of at the High School. The written work was announced for Monday, June 19th, and was to be commenced simultaneously in all the grammar schools, and conducted by teachers of the High School, deputized for that purpose.

The superintendent read a letter received from Dr. GREGORY, giving an encouraging account of the Illinois contribution to the Centennial Exposition. It was suggested that something might be done in the way of preparing drawings and the like for the Chicago Exposition next fall, during the closing days of the present term.

Mr. PICKARD, in response to a unanimous written request to that effect, promised to prepare a paper on the subject of "Moral Culture in the Schools," to be read before the teachers. This paper, or lecture, will be prepared during the coming vacation, and will probably be read about the beginning of the fall term of the schools. Mr. PICKARD further gratified the meeting by expressing the opinion that the teachers would be paid before the close of the present school-year (June 23d).

Assistant Supt. DOTY spoke of the attendance of teachers at the Centennial Exposition, and requested teachers, intending to go to Philadelphia during the summer season, to leave their names with him with a view to forming parties. The hope was also expressed that special and reduced rates would be secured from the railroads.

The meeting was finally adjourned till Saturday previous to the commencement of the fall term, at 3 o'clock, p. m.

Several typographical errors conspired to make nonsense of an obituary notice of Miss ANNA BYRNE, late of the High School, which appeared in this department in the June number. This is regrettable, not only on account of the feelings of the friends of the deceased, but because the notice was written by one with whom Miss BYRNE did her last work in Chicago, and who had known her long and intimately. That such reparation as is possible may be made the notice is now published as written.

DIED, at the residence of her parents, Racine, Wis., May 2d, 1876, Miss ANNA BYRNE.

A brief telegram to the *Chicago Tribune* brought this sad announcement of the death of one of the best teachers connected with the public schools of this city. Miss BYRNE was appointed to the Franklin School in 1868. After two years suc-

cessful service, she was elected to a position in the High School, which she retained until last Christmas, when the strong will that had so long sustained her was obliged to yield to the assaults of disease. During all those years, she taught with rare success in spite of very great physical debility, and by her unflinching devotion to duty, won the highest regard from all who knew her. Her associates will remember her as a Christian lady, gifted, cultured, refined, and most unassuming; her pupils, as a true teacher, patient, affectionate, apt to teach, and a real friend. Miss BYRNE possessed in a marked degree those characteristics of the ideal teacher which inspire pupils with a high sense of self-respect, a profound regard for the right, and enthusiasm in the acquisition of knowledge.

May sweet remembrance of such teachers be a constant benediction to those who assume the burdens where they lay them down.

The *Chicago Tribune* claims, from time to time, to be a friend of the Public Schools. It is especially inclined to boast of this valuable friendship when by so doing it can make a point against a political opponent, especially if that opponent has the reputation of being unfriendly to the schools. The *Chicago Tribune* is not a friend of the Public Schools. It has no adequate idea of their scope or function. It has, repeatedly and editorially, within twelve months, urged and agreed substantially that they were, or should be, mere eleemosynary institutions for the accommodation of those not otherwise provided for. Its only test of the value of a school system is a matter of dollars and cents. That system is best which costs least. By its logic, the school system of Alabama is better than that of Massachusetts.

The *Chicago Tribune* admits that the recent report of a committee of the Board of Education is repugnant to the feelings and judgment of the better class of citizens. Yet it urges the committee to resist that better sentiment of the best people of the city. It calls upon the Board to listen to no argument in the matter. It urges that the schools no longer need principals, since, as corporal punishment no longer prevails, there will be no boys to castigate! In point of fact, a kind word of either teachers or their work, in this city or elsewhere, would seem to secure entrance to its pages only by accident. It is barely possible that its ignorance, misrepresentations and unkindness are the result of carelessness rather than malice. If each one of the ten thousand teachers of Illinois will spread a knowledge of these things "where it will do the most good," perhaps the *Tribune* will define its position on the practical aspects of the school question.

The Committee of the Chicago Board of Education, on Schemes for New Educational Improvements, has been heard from. The Committee has discovered, after mature deliberation among and between its members, that three changes in the present order of things are so desirable that it unanimously recommends them. I. That Principals of schools should be required to take charge of a room in their respective schools, and teach the same average number of pupils as general assistants. II. That there should be no more than one teacher for every 63 pupils in any school. III. That no more pupils should be admitted to the Normal School—that the Normal School should be "relegated to" the High School, and its teachers should be dispensed with.

A majority of the Committee recommend, also, that High-School pupils be reduced to half time, whereby double the number can be accommodated—that the special teachers or superintendents of music and drawing "be abolished," and that there be a reduction of the salaries of all teachers and officers of the Board, with one notable exception, of from ten to thirty per cent. of the present salaries.

The report of the Committee concludes with an exegetical, hortatory and prophetic paragraph, wherein "the present high efficiency of the Public Schools" is asserted, the existence of "public spirit and patriotism" on the part of teachers is mentioned as an inference or belief, and a "happy time" to come hopefully anticipated. This very remarkable document was signed by Inspectors, PERRY H. SMITH, W. K. SULLIVAN, WM. J. ENGLISH, T. J. BLUTHARDT, RODNEY WELCH, and JOHN C. RICHBERG. These gentlemen inform us that they have given much time

and attention to the matters considered in the report, and it is not, therefore, unfair to infer that they have deemed the "reforms" which they have approved, and especially those which they have unanimously recommended, as peculiarly appropriate for the wealthy and intelligent metropolis of the great State of Illinois in this centennial year, but also in some measure necessary to illustrate, develop and perfect the record of its Board of Education. The Report was received and ordered to be published.

The Report of the Committee, elsewhere summarized, excites a good deal of interest, though perhaps not as much discussion as might be expected. Indeed, the prevailing feeling among teachers is that of the profane old teamster, who, when near the summit of a toilsome ascent with a cart-load of apples, had the rear end-board slyly removed by one of a mischievous crowd of urchins, with a view to illustrating and testing the old man's powers of objugation. At the moment when he took in the full force of the situation, each particular apple, in obedience to the law of gravity, was seeking a state of equilibrium, and his tormentors at a prudent distance stood in supreme expectation. "Boys!" said he, "it's no use, I'm not equal to this occasion."

Nevertheless, the teachers think it hard that in the city of Chicago, in the year of our Lord, 1876, even two-fifths of the members of a Board of Education can be willing to entertain, publish, and urge the adoption of any one of the three pedagogical schemes which were unanimously recommended. Thrust sixty-three pupils upon every teacher in every grade! Abolish the principalship, and leave those monster schools of from ten to fifteen hundred pupils without a head!! Abolish the Normal School!!! And then, innocently, and with the most unworldly guilelessness assure us that they "have not deemed it wise or prudent to make any recommendation that would in any way impair or weaken the *efficiency or management* of the schools."

Besides, teachers have the best of reasons for believing that there is no public demand, intelligent or otherwise, for the proposed changes. The committee itself intimates that its "exceedingly unpleasant and disagreeable task," was inspired by a sort of interior or original suggestion. The Hon. THOMAS HOYNE, fresh from the people, supposing himself to be mayor, and representing a constituency of which no one need be ashamed, in his inaugural message to the Council, though taking extreme and very radical ground in favor of economy, expressly excepted the teachers and schools from his proposed changes. The *Chicago Tribune*, which alone of all the publications in the city has endorsed the report in all its fulness, when exhorting the Committee to stand up and defend its report to the bitter end, like little men, told them that they would have to stand a great pressure against it from the best people in the city.

Aside from the mere matter of reduced salaries, upon which point complaint is liable to be construed into selfishness, it is believed that the course recommended in the report is fearfully retrogressive, and disagreeable to Chicago, from an educational point of view. It remains to be seen whether the impending action of the Board will illustrate the fact:

"Malice rides on an Arab Courser, strikes his blow as sure as fate.
Justice, travelling in his carriage, mostly comes an hour too late."

EDUCATIONAL INTELLIGENCE.

Peoria County.—The Annual Institute will be held in the County Normal School Building in Peoria, beginning July 3d, and continuing four or six weeks. Dr. SE WALL, Colonel POTTER, and the County Superintendent will do the work.

REPORT OF ATTENDANCE FOR MAY 1876.

	No. of Days of School.	Av. Number Enrolled.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	SUPERINTENDENTS.
St. Louis, 3d Quarter,	50	31 245	25 364	81	5 387	.....	W. T. Harris.
Peoria,.....	30	8 171	2 703	93-9	313	1 059	.....
Hannibal, Mo.,.....	19	1 957	1 134	94-8	127	595	*G. W. Mason.
+Belleville,.....	..	1 605	1 405	88	234	415	Henry Raab.
Marshalltown, Iowa,.....	19	808	649	95-7	56	376	C. P. Rogers.
Moline,.....	30	.....	702	94	.....	366	L. Gregory.
Macomb,.....	31	719	621	94-5	39	368	J. G. Shedd.
+Amboy,.....	30	578	473	82-4	125	137	L. T. Regan.
Lacon,.....	..	346	287	83	67	80	D. H. Pingrey.
+Lena,.....	22	323	267	82-7	6	47	C. W. Moore.
Warren,.....	23	309	272	88	28	107	D. E. Garver.
N. Belvidere,.....	23	253	226	94-9	18	104	H. J. Sherrill.
+Rantoul,.....	23	229	123	53	63	54	I. N. Wade.
+Marine,.....	22	198	170	86	33	67	Wm. E. Lehr.
Walnut,.....	20	101	86	85	90	20	G. P. Peddicord.
+Morris,.....	20	635	522	82	242	187	M. Waters.

NOTICE.—These reports must reach us before the 16th of the month to insure publication.
 *New Rules. *Principal High School.

St. Clair County.—The St. Clair County Teachers' Institute will convene in the Court House, in this city, at nine o'clock a. m., on Monday, the 3d of July, and continue, the 4th excepted, during the week.

Prof. THOMAS METCALF, of the Normal University, will give instruction in the common branches, and in the theory and art of teaching; Prof T. J. BURRILL, of the Industrial University, in Natural History and Botany; and Mr. EMIL DAPPRICH, of this city, in Natural Philosophy.

The railroads passing through this city will return members for one-fifth fare. Examination for certificates, Saturday, the 8th of July.

Belleville, Ill., June 16th, 1876.

JAMES P. SLADE,
County Supt. Schools.

Fulton County—Notice is hereby given that a Teachers' Institute will be held at Farmington, beginning on Monday, July 31st, 1876, and continuing four weeks. Special attention will be given to the "Common Branches," but a class in the Sciences will be formed for the accommodation of those desiring to fit themselves for work in first-class schools. Competent instructors have been secured. Tuition, four dollars. For particulars address,

HENRY C. COX, Principal.

Randolph County.—The County Teachers' Association will hold a four-days' session at Sparta, the latter part of August. Further particulars will appear next month.

P. N. HOLM, Co. Supt.

LaSalle County.—DEAR SCHOOLMASTER:—A Teachers' Institute will be held at Streator, commencing August 21st, and continuing two weeks. Instructors, J. PIPER, J. H. FREEMAN, W. BRADY, W. W. JOHNSON and others. Prof. DAVID SWING, will lecture to the Institute on the evening of August 24th.

R. WILLIAMS, Co. Supt.

Moultrie County.—A Normal School, to continue six weeks, will be opened at Sullivan, July 17th. Prof. BOLTWOOD, of Princeton, the County Superintendent, and others if needed, will conduct the exercises. For particulars, address,

J. K. P. ROSE, Co. Supt.

Pope County.—The Annual Institute will be held at Independence School House, September 18th to 22d. A carefully arranged programme has been prepared and a profitable time is expected.

Whiteside County.—A Normal School will be held at Lyndon, lasting six weeks, commencing July 10th. Full particulars can be obtained of S. W. MAXWELL, of Lyndon, Illinois.

Livingston County.—The Institute will be held at Pontiac, opening August 14th, and continuing two weeks. A full statement will appear in August number. For particulars, address, M. TOMBAUGH, Co. Supt., Odell.

Logan County.—The Annual Session of the County Normal will commence July 17th, in Lincoln. It will continue four weeks. Prof. TURNER, of Atlanta, will assist the Superintendent. For particulars, address, J. G. CHALFANT, Co. Supt.

Pike County.—A. C. COTTON will conduct a six-weeks' Normal at Griggsville, commencing July 10th. See notice of Barry Normal in June number.

Richland County.—The Institute will hold a session at Olney, commencing on August 28th. JOHN J. COONS, Co. Supt.

Madison County.—There will be a four-weeks' Normal at Highland, in August. AD. A. SUPPGER, Co. Supt.

Mason County.—The Institute, noticed in the June SCHOOLMASTER, will open July 10th, at Mason City. It will continue six weeks. For particulars, address S. M. BADGER, Co. Supt.

McLean County.—The Annual Institute will be held in the Wesleyan University building, and will begin August 7th. The session will continue three weeks. Profs. BURRINGTON and FORBES, and Messrs. CARTER, PAISLEY and Dr. MARSH, will assist Supt. SMITH.

ILLINOIS NORMAL.

The nineteenth year of the Institution closed on the 22d of June. Monday, Tuesday and half of Wednesday, were spent in examinations. Quite as large a proportion as usual passed these examinations successfully. The number of visitors was about as great as usual,—a large proportion of them being former graduates and students.

On Wednesday afternoon, the Alumni Association held their business meeting; —CHARLES L. CAPEN, President. JOSEPH CARTER was chosen President for the ensuing year. Following the business meeting, came the Alumni dinner. This was a very substantial and elegant repast, prepared by Mrs. POST, of Bloomington. About eighty of the Alumni and their friends found seats at the table. Among the guests, were several members of the Board of Education, Rev. RICHARD EDWARDS, Ex-President of the University, members of the Faculty, and others. The toasts were read by Miss LOU. C. ALLEN, of Champaign; and, with the several responses, they occupied more than an hour very pleasantly. In the evening, came the Literary exercises of the Association, in Philadelphian Hall. Greatly to the disappointment of all, neither Mr. KELLOGG nor Mrs. STEVENSON could be present. Both sent their papers. Mrs. STEVENSON's was read by Miss JULIA F. MASON, and Mr. KELLOGG's, by WILL. H. SMITH.

Commencement Day, Thursday, the 22d, was a beautiful summer day, but rather warm. At ten o'clock, the hour of beginning, the large hall was packed by an intelligent audience. The exercises opened with prayer by Elder E. P. HALL, of Normal. The singing was under the direction of Prof. F. A. PARKER; and it was the best perhaps that we have had on similar occasions,—a solo by Miss JULIA P. CODDING, was especially applauded.

Twenty persons graduated, namely, CHARLES A. McMURRY, TRUMAN B. MOSHER, BENJAMIN S. HEDGES, JOSEPH F. LYON, LOUISA C. LARRICK, LEWIS C. DOUGHERTY, WM. H. CHAMBERLIN, DEWITT C. TYLER, CHAS. L. HOWARD, J. CALVIN HANNA, J. THOMPSON JOHNSTON, MARY L. BASS, ARABELLE D. LOKER, ASBURY M. CRAWFORD, GEORGE H. BEATTY, LEROY B. WOOD, DANIEL S. BUTTERBAUGH, AMANDA M. PUSEY, GEORGE W. DINSMORE, and CLAUDIUS B. KINYON. Mr. McMURRY, was Salutatorian, and Miss BASS, Valedictorian. The twelve,

whose names stand first in the list, presented their Essays and Orations. All these exercises were creditable, but the effect of some would have been better, had the speakers thrown a little more force into their performances. Dr. EDWARDS, in his usual, earnest manner, presented the diplomas.

For several years, the members of the school have given the graduates and their friends a complimentary dinner, immediately following the public exercises in the hall. This year, the dinner was omitted, and a Reception in the evening was substituted. The Reception was given in the Society Halls, and was a very happy occasion. Both the large Hall and the Society Halls had been decorated with much taste by the students.

On Tuesday evening, it being Prof. METCALF's fiftieth birthday, the members of the Faculty, and some of the pupil-teachers, called at his residence and presented him with a luxurious easy chair. Miss NELLIE EDWARDS made a brief and appropriate presentation speech, to which the Professor warmly responded. Prof. Cook was also made the recipient of a beautiful silver card-holder, a gift from one of his classes.

The BOARD of EDUCATION held their semi-annual meeting on Wednesday and Thursday. They elected Prof. HEWETT permanent President of the Institution, increased the salaries of Professors FORBES and McCORMICK, and made a re-arrangement of the chairs of the Faculty. All who have taught this year in the Normal Department are to be retained for the year to come. In the Training Department, Prof. METCALF is to be assisted by an experienced teacher, not yet appointed; and the Grammar School will be placed under a permanent head. By a resolution of the Board, any teacher who can show, by examination before the Faculty, that he is familiar with the subjects to be taught, will be allowed to take a year of training in the methods of teaching, exclusively, and will receive a certificate on the completion of his work. A larger appropriation than heretofore was also made for the purposes of the Museum. The Normal now offers facilities, unrivaled in the West, to say the least, for any who want a Normal course of instruction, or a purely professional course, as well as for those who wish to make Natural Science a specialty, or to gain a good Academic Education in any of its departments, from the lowest up to a complete preparation for business, or for entrance into our best colleges.

So few persons applied for admission to the proposed Natural Science School for this summer, that it has been abandoned: so the Normal Building is shut up to slumber among its trees till the 4th of next September.

PERSONAL.

CHARLES I. PARKER, of Danville, resigns the superintendency of the schools of that city—reason, a reduction of salary. He is a graduate of Dartmouth, a superintendent of many years' experience, and of pronounced skill. Some other town will probably say "come up higher." He is succeeded by Mr. TAYLOR, who has had charge of one of the schools in Danville. Mr. TAYLOR is a young man of energy and enthusiasm.

Dr. JOHN M. GREGORY, of Champaign, on account of the action of the Board, has reconsidered his resignation, and has consented to remain in his present position. The news caused a general jubilation at his home, and will be received with profound satisfaction wherever he is known.

LYMAN B. KELLOGG, of Emporia, Kansas, delivered the annual oration before the Alumni of the Illinois Normal, June 21. He started, and for several years was principal of, the Emporia Normal.

Rev. C. C. BURLEIGH recently delivered his lecture on "The Common Schools and how to preserve them," to the citizens of Normal. Districts that have grown

lukewarm on popular education, should call him to their aid. He stirs up the dry bones. The lecture is the best argument for the common school that we have heard. He is needed in Illinois just at this time, and should have fifty audiences before he leaves us.

L. P. BRIGHAM remains at Arcola next year. The people think that he has done excellent things for them. The school building was destroyed by fire early in the year. It was doubtless the work of an incendiary. The creature that could apply a torch to a school-house, must be DARWIN's missing link between the apes and—the lower animals.

LESLIE GREENWOOD, formerly of Des Moines, succeeds Mr. ETHRIDGE in the agency work of the HARPER Brothers. Mr. G. will find that the HARPERS have hosts of friends in Illinois. His address is 117 State St., Chicago. See the advertisements in this and every number.

L. T. REGAN remains at Amboy next year, with an increase, in his salary, of \$200.

Supt. CRARY, of Whiteside, writes us that they are going to have a rousing time at their Institute at Sterling. We haven't a doubt of it.

S. W. PAISLEY, for three years superintendent of the Watseka schools, is booked for Lexington next year.

ESPY SMITH is re-employed at Minonk.

R. H. BEGGS is offered the Wilmington schools for another year. He will probably accept.

A. C. COTTON, of Griggsville, retires from the profession to engage in the study of medicine. We are sorry to lose FRED. from the ranks.

D. H. PINGREY, of Lacon, takes charge of the Chenoa schools.

O. M. TUCKER, of Chillicothe, for eleven years a prominent teacher in this State, has accepted a position in the preparatory department of the Western University of Pennsylvania, at Pittsburg. He enters upon his duties in September. Mr. TUCKER carries with him the best wishes of THE SCHOOLMASTER.

H. H. C. MILLER, of Pittsfield, retires from the ranks and enters upon the practice of the law.

At the Board's request, Mr. MILLER designated his successor. He selected THEODORE H. JOHNSON, of McGregor, Iowa. The pupils of the High School gave Mr. M. a reminder of his stay among them, and the Board passed complimentary resolutions. He can be found hereafter at Room 13, Hawley Block, S. W. Corner Dearborn and Madison streets, Chicago.

Prof. METCALF, of Normal, found himself at his fiftieth birthday June 19th. A number of friends, hearing of the fact, gathered at his house in the evening and left an elegant study-chair as an expression, in a small way, of their feelings of love and respect.

GEORGE COLVIN remains at Pekin, with an increased salary.

BOOK TABLE.

Alden's Introduction to the Use of the English Language.—Grammar and Rhetoric combined. POTTER, AINSWORTH & Co., New York.

This little book aims to teach the pupil to speak and write the English language correctly by practice in so doing, which is certainly the correct method.

Each subject is introduced by sentences illustrating it. Definitions and explanations are brought out by means of questions on the sentences. Many of the questions throughout the book are commendable, because they lead the pupil to think; while some of the answers are not, because their tendency is to prevent his

thinking. In "Thought Analysis," Chap. XXXIX, all the questions are answered, leaving the pupil little chance to think for himself. The author, however, says in the preface, that answers would not have been given, had he felt sure that only well-trained teachers would use the book. More questions are asked than are necessary, if the teacher who uses the book knows how to teach.

The conjugation of verbs is given in a good form.

A very pleasant little story illustrates the rules in punctuation. This adds to the attractiveness of the book, and shows the pupil the value of punctuation marks in bringing out the meaning, better than disconnected sentences would.

The incorrect expressions given for correction are such as pupils are likely to make, and such that the errors are not perceived without some thought. In these respects they are an improvement on the "false syntax" usually found in grammars. They are placed together at the back of the book instead of being given on every page, which is also commendable; for errors seen every day become so familiar as hardly to seem like errors. Pupils generally furnish enough incorrect expressions of their own for daily use, without having a constant supply manufactured for them.

Analysis of Letter-Writing. By CALVIN TOWNSEND. IVISON, BLAKEMAN, TAYLOR & Co., New York and Chicago.

This book treats in Part I, of The structure of A Letter; in Part II, of The literature of A Letter. Part I is divided into Introduction, and Chapters I and II. Chapter I is devoted to things to be observed; Chapter II, to things to be avoided. Chapter I discusses Materials, Penmanship, Heading, Address, etc.; Chapter II. Inexcusable Blemishes. Among the latter we notice *Interlineations, Blots, Flourishes, Figures for words, etc.* Part II is similarly analyzed. Any one, who has a business correspondence of any extent, realizes the necessity of such a book. We have only commendations for this work. Address EDWARD COOK, 133 & 135 State street, Chicago.

IVISON, BLAKEMAN, TAYLOR & Co., of New York, have recently published a pamphlet which gives the fullest description of the U. S. government surveys, that we know. The matter here found ought to be brought to the notice of all the common-school teachers of the State. Do you know what is meant by a "range?" By the "third principal meridian?" By the "base line?" Do you know whereabouts in a township the "13th section" is? Do you understand how the "corrections" of the survey are made? If you or your pupils are ignorant on these or similar points, send 25 cents to EDWARD COOK, 135 State street, Chicago, and get a book that will give you, in plain language, the information you lack.

Literature for Little Folks. Selections from standard authors, and easy lessons in composition. By ELIZABETH LLOYD. Philadelphia: SOWER, POTTS & Co.

The little folks will be pleased with this book at first sight; for the binding in brown and gold is very beautiful indeed. The contents, too, will delight them, being little poems, which, in the language of the author, "are among the best that can be found in the small range of good child-literature." It is gratifying to find here some of the old favorites which have been sought for in vain, in the recent publications for children. The tendency of late years has been to push aside, if not to put out of sight altogether, some of the best pieces ever written for the little folks,—and—because they are old!

About how old is "Mary's Lamb" to the child that reads it to-day, for the first time? and does he ever grow too old to be touched, and made kinder-hearted by reading "We are seven?" In the old world, age adds a charm to literature as well as to faces; but the people of the new, seem, from a peculiarity of mind, to require the constant stimulus of novelty. There is another feature in this book, however, that will commend it to parents and teachers particularly. Each stanza memorized, is accompanied by a composition lesson which it suggests; and the teacher is expected to explain the lesson for the next day, and to drill the class carefully in pronunciation. An easier, or a more pleasant initiation into the mysteries of composition cannot be imagined, and we take pleasure in recommending it to those who have the training of children. It is to be hoped that teachers will not be too indolent to get out of the book, the good that is certainly in it. Mrs. H.

A. S. BARNES & Co. will shortly issue *The History of the City of New York*, by MRS. MARTHA J. LAMB. It will appear in twenty-four parts, of sixty-four pages each, and will be sold by subscription only.

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LIPPINCOTT'S MAGAZINE for July, commencing a new volume, handsomely illustrated, now ready, containing a description of the exhibits in the main building of the exhibition, illustrated, and a poem of fifteen pages, "Psalms of the West," by SIDNEY LANIER.

CONTENTS:—1. The Century—Its Fruits and Its Festival. Part VII. In the Main Building. Illustrated; 2.—A Glimpse of Philadelphia in July, 1776. By REBECCA HARDING DAVIS. Illustrated; 3.—Psalms of the West. By SIDNEY LANIER; 4.—The Atonement of Leam Dundas. Part XI. Conclusion. By Mrs. E. LYNN LINTON, author of "Patricia Kembell;" 5.—On the Eastern Shore. First Paper. By ROBERT WILSON; 6.—Thee and You: A Story of Old Philadelphia. In two parts.—Part II. By EDWARD KEARSLEY; 7.—The Angels of the Dew. By MARY B. DODGE; 8.—Letters from South Africa. VI. By LADY BARKER; 9.—The Rainbow of the Termini. 10.—At the Last. By MAURICE THOMPSON; 11.—An Episode of the Revolution. By CHARLES DIMITRY; 12.—The Markets of Paris. By LUCY H. HOOPER; 13.—Our Monthly Gossip. Yankee Doodle—Ghosts in the Eternal City—News of the Apollo Belvedere—Newspaper "Personals" a Hundred Years Ago; 14.—Literature of the Day.

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ILLINOIS TEACHER, }
Volume XXII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

AUGUST, 1876.

NUMBER 99.

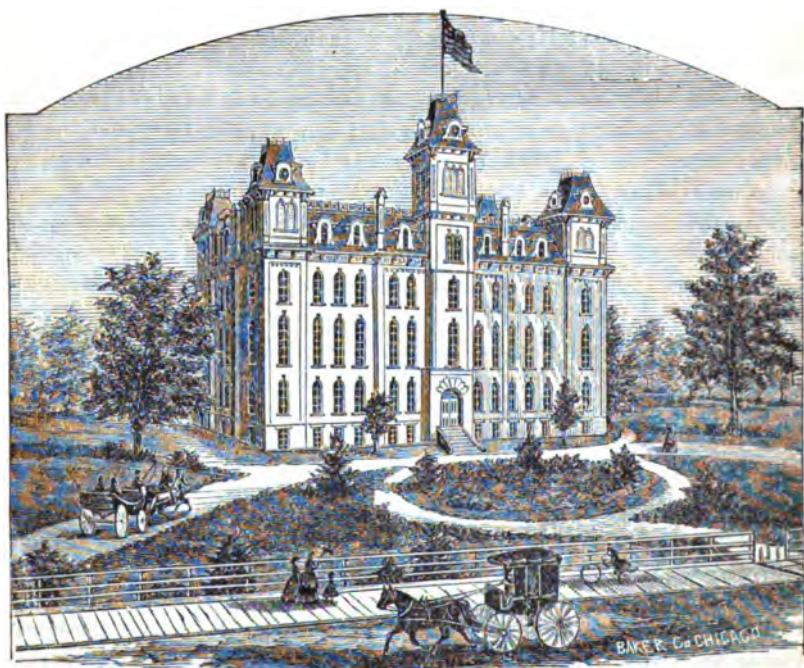
THE ILLINOIS WESLEYAN UNIVERSITY.

This flourishing university, located at Bloomington, Ill., owes its existence to the public spirit and forethought of some of the early settlers of that city and vicinity. Its short history of twenty-six years has been eventful. Depending upon the benevolence of its patrons for financial support, it cannot chronicle uninterrupted advancement. Its growth has not been continuous. It has had its winters of adversity as well as its summers of prosperity; and yet, in its darkest hours, it has ever had true and liberal friends. A few words, as to its past history, must suffice.

Its first board of trustees, numbering thirty members, effected an organization on the second of December, 1850, and elected Rev. R. ANDRUS, then a young man,—a graduate of McKendree College,—to the chair of Mathematics. Professor ANDRUS proceeded at once to organize a preparatory school, which held its sessions in the Methodist Church. In July, 1851, Rev. JOHN DEMPSTER, D. D., of Concord, New Hampshire, was elected president, and Rev. WILLIAM GOODFELLOW, A. M., vice president and professor of Natural Science; and the school began its session in September with a largely increased attendance.

In 1852, Rev. CLINTON W. SEARS, A. M., was elected to the chair of Ancient Languages. At the first annual commencement, held July 7th, 1853, the degree of A. B. was conferred upon JAMES H. BARGER; and the following year, the same degree was conferred upon W. F. SHORT. These were the only graduates under the first administration. In the mean time, the work of securing means for the erection of a suitable building progressed slowly. On the ninth of August, 1855, Professor SEARS was elected president, Dr. DEMPSTER having declined the position, and a vigorous effort was made to relieve the university from financial embarrassment. But the effort proved unavailing; the faculty all resigned; and the building, nearly completed, was sold under a mechanic's lien.

Such was the discouraging situation when, in 1857, Rev. O. S. MUNSELL, A. M., was called to the presidency, and Rev. C. W. C. MUNSELL to the agency of the institution. On the tenth of September, 1857, the school was re-opened, with three professors and seventeen students. During the entire year only sixty names were enrolled, and of these only seven were in the collegiate department. The number in attendance, however, steadily increased; and at the commencement, in 1861, H. C. DEMOTTE and P. WARNER received the degree of B. S., being the first graduates under the new organization. At the same commencement, H. C. DEMOTTE was elected professor of Mathematics, a position which he still retains. The annual catalogue of 1860-61 shows ninety-two students enrolled, thirty-two of whom were in the collegiate department.



During the war the university furnished its full quota of volunteers. On the twenty-sixth of May, 1862, upon a sudden and urgent call from the Governor of the State, one of the Professors and thirty-two of the forty-three students then in attendance offered their services, and were mustered in as members of Company G, 68th Illinois Volunteers.

After the close of the war the growth of the university was much more rapid. The large increase in students demanded additional teachers. This want was promptly met; and the records of 1873 show six professors and two hundred fifty-two students. Of the students, one hundred seventeen were in the collegiate department.

On the twentieth of March, 1873, President MUNSELL presented his resignation, which was accepted; and the duties of the office, thus vacated, were assigned, temporarily, to the vice president.

The university owes much of its prosperity and success to the efficient labors of President MUNSELL, who, during a period of sixteen years, was unceasing in his efforts in its behalf. And even greater praise is due Rev. C. W. C. MUNSELL, who, as financial agent, for nineteen years has not only freely given his services, but, also, has given largely of his means to assist in carrying forward the enterprise.

In this hasty sketch it is impossible to allude to all who have served as teachers in the university, from time to time; only one or two more names can be mentioned. During the summer of 1873, Rev. SAMUEL FALLOWS, D. D., of Wisconsin, was elected president; and, contrary to the fears of some of the friends of the university, the collegiate year began with a larger number of students than had ever before been in attendance. The university continued to prosper under President FALLOWS' administration, until the annual commencement in 1875, when he tendered his resignation, in order to enter another field of labor.

Rev. W. H. H. ADAMS, D. D., a graduate of the Northwestern University, and, also, of the Garrett Biblical Institute, was elected to fill the vacancy occasioned by the resignation of President FALLOWS; and the university began its work in September, 1875, under very favorable auspices. The annual commencement of 1876 closed the most prosperous year in the history of the institution. The records show an aggregate attendance of four hundred and twelve students, and eighteen professors and instructors.

Ladies having been admitted to all the privileges of the university in 1870, a few at once entered its classes. That number has rapidly increased. During the past year more than one hundred ladies have been in attendance.

This sketch would be imperfect without reference to the Law Department. This was organized in 1874, by electing R. M. BENJAMIN, A. M., Dean of the law faculty, and O. T. REEVES, A. M., and R. WILLIAMS, A. M., professors. The success of the enterprise has exceeded the expectations of its most sanguine friends. At the annual commencement, in 1875, the first law class, consisting of seven members, graduated, receiving the degree

of Bachelor of Laws: and, at the recent commencement, a class of ten received the same degree. The law course is thorough and extensive, consisting of two years of study of thirty six weeks each. The graduates of this department are admitted to practice in the courts, without further examination.

The collegiate year 1876-77 will begin September 19th, with the following board of instruction: Rev. W. H. H. ADAMS, D. D., President, and Professor of Metaphysics; H. C. DEMOTTE, A. M., Vice President and Professor of Mathematics; G. R. CROW, A. M., Professor of Latin Language; J. B. TAYLOR, A. M., Professor of Natural Science; Rev. W. O. PIERCE, A. M., Professor of Greek Language and Hebrew; SUSAN E. HALE, A. M., Professor of English Language and Literature; SUE M. D. FRY, A. M., Professor of Belles-Lettres; Rev. J. D. FRY, A. M., Professor of Moral Philosophy and German; R. R. BROWN, A. M., Professor of Natural History; Rev. J. O. WILSON, A. B., Instructor in Elocution; F. A. PARKER, Professor of Vocal and Instrumental Music.

The Law Faculty is at present composed of the following named gentlemen: R. M. BENJAMIN, A. M., O. T. REEVES, A. M., R. WILLIAMS, A. M., IRA J. BLOOMFIELD, O. W. ALDRICH, Ph. D., and W. E. HUGHES.

A few special features of the Illinois Wesleyan University may be mentioned in this closing paragraph. Its courses of study are broad and liberal, and are designed to accommodate all who may desire to acquire thorough culture. Its regular courses compare favorably with those of any other university in the land. In addition to these, it offers a somewhat more limited course for the accommodation of non-resident students; the completion of this course entitles the applicant to the degree of Bachelor of Philosophy. To those who have already acquired collegiate honors, the university offers post-graduate courses in the following departments: Mathematics, Natural Science, Philology, Philosophy, and History and Politics. To the successful applicant in any one of these courses of study, the degree of Doctor of Philosophy is awarded.

The above is the merest outline of the origin, history, and present condition of the Illinois Wesleyan University. Nothing has been said of its beautiful campus, its elegant and commodious buildings, its substantial endowments, or its future prospects. All these might properly claim attention; and yet, for the present, our crowded columns forbid further comment.

GOOD-NATURED FIRMNESS IN SCHOOL MANAGEMENT.

In order to manage a school well, one must be mentally superior to his pupils. If he is, there are many ways in which he may accomplish his object. The method he chooses will, perhaps, depend upon the mental make-up of the manager. Sometimes a sudden shock is the most salutary for clearing the atmosphere; again the gentle-zephyr method is best; but the one surest to win and the most lasting in its effects is *good-natured firmness*. This is especially beneficial to those mischievous pupils who have no particular malice in their pranks.

A large river can no more be forded at noon, in the sunlight, than at midnight, in the darkness, but it makes a deal more comfortable impression in the light,—so a teacher, by being pleasantly firm, can accomplish his object with just as much certainty, and with far better effect upon the minds of his pupils, than by being sternly and forbidingly firm. Good-nature is the sunshine of the schoolroom, and its influence there is scarcely less salutary than that of the real sun-light outside.

There is a teacher, in the country, near Decatur, who has a plan of deferring punishment, and who, *it is said*, in consequence, has a wonderful power over his school. A boy commits an offense and is brought before the teacher, who, after due investigation, says: "James, I shall be obliged to punish you, but you may be seated *now*." In a week or so he calls James before him again and says in cheerful tones: "Did I not, a few days ago, promise to whip you?"

"Yes sir."

"Very well. That will do for to-day. You may be seated."

After another postponement or two, he calls the boy and, with the utmost cheerfulness, whips him.

Now, if others, less wise, should attempt the same thing, though they might inspire dread, they would arouse such a vigorous hatred that their work, if not a failure, would be seriously impaired. In this case it was the certainty of punishment, coupled with that good-nature which no one can withstand, that made this man successful.

In cases of vicious mischief I have found a good dose of honest indignation, vigorously given, exceedingly stimulating; but it may be doubted whether the same indignation might not have been good-naturedly expressed with better effect.

DEGARMO.

HOW TO SUBJECT A CORPS OF TEACHERS TO EFFICIENT SUPERVISION AND NOT REDUCE THEM TO OPERATIVES.

P
The adoption of a definite course of study with subdivisions corresponding to the number of classes, all following each other in natural order, necessitates the mastery of each of the successive portions as a preparation for the next higher. When the pupils in the lower grades or classes are sufficiently numerous to occupy several school rooms under different teachers, the progress and attainments of the several sections of each grade or class must be sufficiently uniform to enable them to come together in the upper grades or classes. This necessitates a degree of uniformity of instruction, and it is just here that *the mechanism of the graded system touches its very life*, as the experience of too many of the larger cities plainly shows. To secure this uniformity of instruction the course is mapped out in minute details, and the time to be devoted to each part, the order in which the steps are to be taken, and even the methods of teaching, are definitely and authoritatively prescribed. As a result, the teacher is not free to teach according to his "conscience and power," but his high office is degraded to the grinding of prescribed grists, in prescribed quantities, and with prescribed fitness—to the turning of the crank of a revolving mechanism.

The supervising principal of a public school in a large city once said to the speaker: "It is idle to ask my teachers to read professional works. They follow the prescribed course of study, and look to me for their methods. Their ambition is to do their work precisely as I direct, and they do this without inquiring whether my methods are correct or incorrect. It is enough that I prescribe them." It is possible that this may be an extreme case, but it illustrates the tendency of the system, when administered as a mechanism. It seems unnecessary to say that this prescribed uniformity, in both the matter and method of instruction, is subversive of all true teaching. Carpets may be woven, garments made, and stone carved, by pattern, but the unfolding and informing of a human soul is not the work of operatives, following appointed forms and methods. The human soul is not touched by the revolving cogs of mechanical methods. True teaching requires the artist's hand and the artist's spirit. Fruitful methods may be evoked; they can never be imposed. They must bear the impress of the teacher's image, and pulsate with the life which he breathes into them. The vital element in every method of instruction is *what the teacher puts into it*, and hence the

prime fact in every school is the teacher. It is not enough that graded schools go through with the forms of a philosophic course of instruction. The knowledge to be taught may be wisely selected and arranged, the successive steps may follow each other in natural order, and the entire mechanism may be so perfect that the revolving cogs touch each other with beautiful precision; and yet, if the whole be not vitalized by true teaching, the system is a failure as a means of education. The one essential condition of success is the informing, vitalizing spirit of free, earnest teachers; and the more philosophical the system of instruction attempted, the more essential is this condition. A routine of mere book lessons may be conducted by a blind plodder who can turn the crank and tighten the screws, but a system of instruction, having for its grand end the right unfolding and training of the mind and heart, requires the insight, the invention, the skill, the inspiration of the true teacher. We are slow in learning that philosophic methods of teaching are practicable only to those who have some insight into their principles. The oral teaching in our schools is often as deadening as the old text-book drills. Some of the object-lesson teachers out-Herod Herod in mechanical teaching, and if I were obliged to choose between the text-book grinder and the crank-turner of prescribed object lessons, I should unhesitatingly take the former, with the assurance that he would have something to grind.

But how can this difficulty be avoided in a graded system of instruction? How can requisite uniformity be secured and, at the same time, the teacher have necessary professional freedom? I do not assume to be able fully to answer these questions.

My first suggestion is, that a sharp discrimination must be made between *results* and *methods*. The essential thing in a graded system is, that there be necessary uniformity in results at stated periods, and this can be attained without denying the teacher freedom in his methods. This teacher will succeed best by one method, and that teacher by another, and each should be left free to use his best power.

Another suggestion may be important. A course of study may prescribe a minimum amount of work for each school term or year, or as a condition of promotion, but the stated order and time of the subdivisions should be merely suggestive. Uniformity should be required only so far as it may be important or necessary. The essential result in a graded system is, that the several classes of the same grade come to the examination for promotion with like attainments. It is not important that the several teachers accomplish the same result day by day or week by week. Nothing is more ridicu-

lous than the attempt to parcel out primary instruction and tie it up in daily or weekly prescriptions, like a doctor's doses. This week the class is to take certain facts in geography; to count by twos to fifty (to sixty would be a fearful sin!); to draw the vertical lines of a cube; to learn to respect the aged, etc.! This also suggests the folly of restricting teachers to the work laid down in the course. One teacher can accomplish more than another in the same time, and, if forbidden to widen her instruction, to turn into new fields, the surplus time will be wasted in useless repetition. A scheme of study can only prescribe the minimum, the essential course. Parallel with this, and diverging from it, are lines of important knowledge, which the teacher should be free to explore. Moreover, it is in these very diversions from the beaten path that the most valuable instruction is often imparted. The teacher carries into them an unusual zeal and interest, and her pupils are thus quickened with a new inspiration. It is taken for granted in this suggestion, that the schools are supplied with well qualified teachers, and this presupposes that they have received necessary professional preparation. We are slow in recognizing the fact that *the essential condition of the highest success of American schools is the thorough normal training of our teachers.*

But the great remedy for the particular evil under consideration is intelligent, flexible supervision. Supervision is of doubtful worth when it exhausts itself on the mere mechanism of a school system. It must, of course, secure uniformity and system, but these may be attained without grooving the teachers' instruction or sacrificing their professional freedom and progress. An experienced superintendent once remarked that the chief business was to keep his teachers out of the ruts. To this end the superintendent must be qualified to instruct, inspire, and lead teachers in the work of professional improvement, and his supervision must be flexible enough to allow free investigation and experiment. It is true that a corps of teachers, imbued with such an earnest spirit of inquiry and progress, will run into no one's groove, but what is thus lost in uniformity will be more than made up in vital teaching.

E. E. WHITE, at Cleveland.

IN all the thousand shops where the varied industries of the land are carried on, the supervising foreman, the gang-boss, and the assistant foreman find a place, yet in many towns where a score of teachers are attempting to form human character, many argue that a superintendent is a supernumerary.

THE MUSEUM AND THE SCHOOL

10
The first museums were the fruits of worship. They were founded in temples at a time when the results of travel and the trophies of conquest were thought to be offerings worthy of the gods.

Later, when with the "advance" of ideas the divine was divorced from nature, when the material and spiritual were set against each other as opposing forces, the museum sank into a mere curiosity shop whose heterogeneous contents were gathered only to startle the eye or amuse the fancy. ADDISON hardly exaggerates the ludicrousness of some of the catalogues of these affairs, in his paper on the "Will of the Virtuoso."*

The naturalist was very generally an object of scorn, not only to the monk, but also to the scholar.† With very good reasons indeed, for such was the popular contempt for his pursuits that few could adhere to them except the "crooked sticks," the harmless queer, who preferred to live apart from their fellows, craving only to be let alone. Even yet this feeling has not wholly passed away. There are remote communities in which the student of nature is still looked upon as a trifle, scarcely above the clock tinker or the wandering tinman. But, as a consequence of that rehabilitation of nature which is characteristic of the age, all this is rapidly changing, and the museum is fast coming to be regarded, by all intelligent persons, as among the highest results of human labor and learning, as a most efficient instrument of human progress, not less essential than the library or the gallery of art.

While it is seen vaguely and in a general way that there must be some connection between these centers of scientific influence and the brilliant advances in scientific discovery, which have immortalized this century, very few know precisely what this connection is. Few know anything definite of the actual operations of a museum, of the immediate purposes of its managers, or of the extent and character of its influence. The mere mass of its material is all that appears to the superficial eye, but this is only so much rubbish except as it is effectively *used* as an *instrument* in the public service. The valuable elements of its power are those least likely to attract attention.

Museums should not be measured by the yard or weighed by the pound, any more than men. It is the fitness of the tool for its uses, and the strength and skill of the hands which guide it, that should be chiefly attended to.

A general discussion of the purposes of these institutions would be out

*Spectator, No. —

†Rambler. Nos. 83 and 83.

of place here, and I shall only undertake to explain some of the operations of our own museum, which have a more or less direct bearing upon the work of the schools.

There are needed, for the teaching of any branch of natural history, competent teachers, well-constructed text-books, and classified material. That the two first are essential most will admit at once. The necessity for the last is less evident, and yet I believe that without it almost no genuine work can be done in any science involving a very complex classification, at least in any condition of the schools which is likely to obtain in this State for many years to come.

Among the highest benefits to be got from a study of science are a practical knowledge of the degree of accuracy, caution, perseverance, thoroughness and *mental honesty* needed to learn the entire and exact truth about *anything*, the habit of exercising these on all important occasions, and a comprehension of the rapidity with which the necessity for their exercise increases with the complexity of the subject. One who has learned by experience how difficult a thing it is even to determine with certainty the species of a grass, or to define by common and distinctive characters a small group of birds or fishes, will be far less likely than before to make crude generalizations in business, in politics, or in philosophy, or to accept alluring theories without a thorough sifting of the proofs.

But this implies, of course, the constant application to the student's work of exact and authoritative *tests*. These in physical science are abundant and conclusive. Because of this, its study affords a most admirable discipline, provided that the legitimate tests are *applied*, and applied *correctly*. A standard of value arises which serves as a general measure of evidence. If, however, they are applied carelessly or unskillfully, nothing can be more pernicious than the results.

The measure of accuracy will be itself inaccurate; and, trusting implicitly to this defective standard as to the evidence of his senses, the student will discover its treacherous character only when this is demonstrated by the inexorable logic of loss and failure. Superficial and inaccurate work in other branches may have its defense, but in science it is totally inexcusable, because far worse than none. Slipshod methods here are not mistaken merely, they are criminal.

In the study of classification, which forms the more important part of every branch of natural history, the final test of correctness is the comparison with specimens *named* by competent authority. My observation has taught me that, without these, errors of peculiar grossness are allowed to

pass unsuspected in the schools of teachers who are far above the average. Indeed this *must* be so unless teachers are all to become specialists. It is not meant that *no* mistakes are tolerable. Errors occur in the work of all naturalists, even the best. But the value of that training in science which leaves its recipients content to make a wren out of a nuthatch, to put a common wasp into the diptera, or a *Ranunculus* among the *Umbelliferae*, must surely be expressed by a minus quantity. This is the kind of inaccuracy which, in later life, results in bankruptcies, in railroad accidents, and in visionary theories of politics and finance.

With a view to supplying the requisite material to all schools, in which it was really needed, without expense to the schools and with the least possible cost to the museum, it was proposed four years ago to receive from teachers and pupils specimens of the plants and animals of their own localities, to return a full set of those correctly named, and with them to send other specimens from other parts of the country, selected to represent the most important groups, so that representations of extra-limetary forms might be had to illustrate the general work of the course. Full directions for the collection and preservation of specimens were issued to all applicants, and several hundred dollars' worth of material, representing especially the lower classes of animals, was bought for distribution. It was believed that sufficient cabinets of specimens might thus be obtained by any teacher having interest enough in his work to be willing to take a little trouble not only at no appreciable expense, but with constant profit to himself and to his students. This plan has been continued with some slight modification to the present time, and is still in force. While the results have been full of discouragement and even serious loss, too few schools participating in the work, and several applying for specimens which have never used them to any purpose, nor made in return any contribution to the common stock, yet the prospect is far from hopeless. The entire *feasibility* of the scheme has been fully demonstrated, as well as the great value of its results wherever it has been worked out. Concerning this last, all expressions of opinion have been too emphatic for mistake. I think I may safely say, that, as a general rule, teachers in this State will hereafter have only themselves to blame if they lack the material for effective work in zoology and botany.

The greatest embarrassments beset the intelligent and conscientious teacher, of zoology especially, on account of the lack of suitable manuals for the determination of genera and species, and the absence of any guides to the practical study of comparative anatomy. The former lack has been supplied in part by the admirable manual of vertebrates recently published.

Analytical synopses of some of the most important groups of the invertebrates of Illinois are in course of preparation at the museum, to be furnished at cost of paper and printing. It should be understood, however, that such mere keys can only be used with profit under the guidance of an instructor already familiar with the subject, or else when access may be had to full cabinets of named specimens. Teachers can greatly aid this work by contributing material, especially from the extremes of the State.

The efforts that have been made through the establishment of summer schools of science, to afford better instruction and training for teachers of natural history, are too recent and too well-known to need recapitulation here. The omission of the school this summer was due to causes, which as far as they can be determined, are unusual and chiefly temporary.

It is not to be denied, however, that unless a respectable number of the teachers of the State take up these and kindred enterprises as their own affairs, and lend them a more active support than heretofore, they must languish and soon come to naught. If left entirely to the scanty leisure and personal interest of a few hard-worked men, it is not possible that they should make any lasting mark.

Surely the teachers of no state ever had a more magnificent opportunity to enlarge the intellectual horizon of the people, and lift a generation to a higher plane, than that afforded to the teachers of Illinois, by the introduction of the "new branches" into the public schools. Have they risen to the height of the occasion? Have they occupied and secured the conquest made in their behalf, or does it to-day lie at the mercy of the enemy, certain to be wrested from an indifferent or a feeble grasp at the first attempt?

S. A. FORBES.

FOUNDERS OF WESTERN COLLEGES.

It has fallen to me to know much of the lives and labors of the founders and faculties of christian colleges, especially in the West, and you will permit me to say that for courageous endurance in darkness and storm, for multiplied burdens cheerfully borne, for steadfastness of faith and purpose when the heavens seemed brass and the earth iron, for self-abnegation and sacrifice, for the very essence and pathos of moral heroism—some of them were, and are, worthier of apotheosis than many a martyr in the calendar of Saints. Spending the dew of their youth and the meridian strength of their manhood in voluntary obscurity and toil, teaching as many hours in the day

as the common district schoolmaster, deprived of books and travel and other helps to perfection and distinction in their several departments ; moral leagues in advance of the average sentiment around them in respect to the nature, methods and uses of culture, and so for the most part, in an uncongenial atmosphere and deprived of the healthful stimulus of sympathy—yet working on and holding on, looking for the dawn that came not, still bearing aloft the banner of light and proclaiming the gospel of culture, till the eye of youth began to grow dim, and threads of gray to appear in the once fair locks, and touches of sadness to tinge the still cheerful tones and smiles, as the shadows of life lengthened, and still the flush of the looked-for and prayed-for morning that should herald the new day of the college, appeared not—I have seen it and know it all.

But, to every such college the daybreak will surely come at last. To not a few it has already come ; by others, the carol of the lark is even now heard in the brightening firmament above them, and the light comes on apace. And *when* these colleges, exalted and purified by trial, emerge from the wilderness, put on their robes of *strength* as well as of beauty, and, with songs of victory, gird themselves for the grander future that opens before them, then will the darkness and sorrow of those early years be but the background of the historical canvas, setting in bolder relief the brightness and glory of the present.

A precious legacy then will be that record of the devotion, fortitude and heroism of those early professors and teachers and friends. It will be spoken of and cherished, as soldiers, when the war is over, cherish mementoes of the weary campaign, the march and the battle. That record, in time, will softly blend with the moral colors that tinge the warp and woof of the inner life of the college ; it will pass into all its reminiscences and traditions ; it will stand in lieu of the ivied walls and moss-grown memorials which hallow the grounds of the elder universities, binding in closer and tenderer bonds the hearts of its alumni. It will be a precious and blessed inheritance—an aureola of light and glory forever.

NEWTON BATEMAN.

EDUCATION AND CRIME.

In his essay, with the above caption, published by A. S. BARNES & Co., S. H. WHITE makes the following points :

That education tends to diminish crime.

That enough of education to add value to labor done, to affect a man's social status, is necessary to influence, in any marked degree, the amount of crime.

That intemperance and poverty are only secondary causes of crime, a neglected education being the ultimate cause.

That the causes which result in the formation of character may be reduced to two,—heredity and environment.

That the latter of these is included in the term education, and that the traits transmitted by the former may be affected by education continued through generations

In view of these propositions, it is suggested that our present system of education should be extended downward, so as to embrace the Kindergarten, by whose influence the early impressions and habits of children shall be salutary and elevating in character.

Also, that a properly varied and continuous occupation of both body and mind is necessary to avoid the inclination to habits whose natural results are pauperism, vice, and crime.

If these conclusions and suggestions are proper, it follows :

That the age for admission to the public schools should be diminished, and such changes made in the course of study as will adapt it to the mental and physical wants of little children.

That police power should be given to educational authorities to compel the attendance in school of all children who are not regularly employed at some industry.

That the promiscuous gathering together of large numbers of all ages in our poor-houses and prisons is a mistake

That the confinement of young criminals in prison in idleness is a kind of punishment which not only fails to accomplish its main object,—the reformation of the offender—but is calculated by its associations to strengthen his disposition to crime and to make him more skillful in its commission.

That reform schools and work-houses combined should be established for the detention, instruction, punishment, and reformation of all vagrant, vicious youth, young criminals, and all persons usually sentenced to our city prisons and county jails.

It is related of SIDNEY SMITH that once, on entering a drawing-room in a West-end mansion, he found it lined with mirrors on all sides. Finding himself reflected in every direction, he said that he "supposed that he was at a meeting of the clergy, and there seemed to be a very respectable attendance."

THE GRUMBLER.

The Grumbler has ever been misunderstood, derided, ridiculed, by the unthinking masses. When I reflect on the course I have pursued toward him, because of my ignorance perhaps, I almost wonder that the bears did not come down out of the woods and devour me up for my wickedness.

But now I have repented; I now see the Grumbler as he is. My mind has been illuminated, and I now understand and appreciate him. Whereas, I was once blind, I now see. In my blindness I hated him—then I came to endure him—I now love him—I heartily, ardently embrace him and his grumblings. I am his disciple, his humble, though earnest, follower.

The Grumbler is eminently, preeminently, a practical man. He has no theories—never speculates, never engages in the uncertain, unsatisfactory processes of reasoning—has no use for logic—no need of either a simple or a sublime faith, but he does regard facts, and these he observes and points out. Ask him his opinion touching any matter, he has none. What are the probabilities? He has nothing whatever to do with the doctrine of probabilities. You can always rest assured that he will never mislead you, for he never tells you what he *thinks*, but what he *knows*. So, gentle reader, if your mind is tossed and troubled, your belief unsettled, your faith wavering, do as I have done—go sit at the feet of the grumbler and learn of him. Let him clear away the rubbish of theories—of speculation—of reason—of faith, and then build up a solid, enduring structure of *facts*. Facts for the foundation—facts for the superstructure—facts for the topmost stone.

Sit at his feet and listen to him as Phædo sat and listened to Socrates, and you will rise and exclaim, "this Grumbler is a god."

I listened to his discourse—or rather his recitation of facts—and I was astonished, delighted; and I think I could do the SCHOOLMASTER no greater good than by reproducing the substance of that hour's delightful discourse. So you will listen now to what the grumbler said. Of course I cannot reproduce with my poor pen, the style of his delivery. I cannot depict his sad, woe-begone face. I cannot paint a sigh, much less a thousand. You understand, dear SCHOOLMASTER, that facts are the only real solemn things in the world. I can only reproduce his words. He spoke as follows:

"The earth, the world as an organized or designed thing, is a failure. What is it for? We are told that it was created for a dwelling place, for the home of man. As such it is a lamentable failure. Fully three-fourths of it is covered with water—and man cannot live on or in the water. Of this one-fourth land not more than one-tenth of it is at all fitted for a dwell-

ing place for man. The vast sandy deserts, the low marshy plains, the mountain heights, the frozen regions of the polar zone, are all waste places. The earth created for the home of man! and only one-fortieth of it can be used for the purpose!

But we have spoken only of the *surface*—nothing of the vast interior, which is all useless—all waste.

Then the moon was made to give light in the night. But how does it do it? Never on duty more than half the time—not more than three or four nights in a month does it do its whole duty. O, the moon is a failure.” I must confess I could discover no evidences of lunacy in this statement.

“Then the weather is a failure, notwithstanding the half million dollars expended annually by the United States government for the Weather Bureau. Man, as a rule, suffers if the temperature is above 75° or below 60°,—a range of only 15°. While the temperature in our latitude ranges from —32° to 100°—a range of 132°. So that whereas man is comfortable when the range of the thermometer is only through 15°, he must suffer and endure the consequences of a range of 117°. Comfortable fifteen times; miserable one hundred and seventeen times. How many days in the year can you lay your hand on your breast and say, ‘now this is just right—not too warm—not too cold—not too wet—not too dry.’ RUSSELL is a careful poet. He exhibits his characteristic caution when he says, speaking of June days, ‘Then, *if ever*, come perfect days.’ The weather is a failure.

Government is far from being a success. Our Nation and our State have been grinding out laws to regulate men, ever since we had an existence as a nation, as a State; and yet men are not regulated; even the law-makers themselves are lawless, fearfully corrupt. Legislation is a failure.

And what shall we say of Christianity, the hope of the world? Why, not more than one-fifth of the inhabitants of the earth are to-day nominally Christian. More than one-half of this number are papists, and of the protestants, so-called, not more than one-tenth are members of any so-called evangelical church, while only a mere handful are real Christians, that is, are members of our (Christian) church. Not more than one in a million have embraced true Christianity.”

I confess I felt sad, but what could I say? I knew I was listening to facts. The Grumbler wiped a tear from the corner of his eye with his knuckle—a tear induced by his emotion, or from the effects of some villainous tobacco he was smoking, I could not tell which, and proceeded. “Schools are good for little or nothing, though they cost millions. Our whole educational plan is a lamentable failure. Now what does our educa-

tional system contemplate? What are schools for? Read any of the so-called able reports of so-called able superintendents, and there learn what our common schools are expected to do for the youth of our country. It is expected that these schools will develop, round out and perfect the physical, intellectual and moral being. Or to put it very mildly, the boys and girls are, at least, to learn to write, spell, cipher, and read and speak the English language correctly. Now it is a glaring fact that they do not learn how to speak and write their own language correctly, or even decently; they do cipher, but they don't know how; they spell as though a *spell* were on them. Why, I received a letter not long since from a graduate of one of these schools in which he asked me the uses of *b-e-a-u-r-a-c-h-s*, meaning *b-o-r-a-k-s*, I suppose, the article used by blacksmiths in welding iron. And how can it be expected that the work can be done well, when the teachers, poor, indifferent as they are, teach only six hours a day, and five days in the week?

No, education is a failure. Our boys and girls grow up with warts on their hands, corns on their feet, they have leaky noses and round shoulders; they are not perfect physically. They fill our prisons and our lunatic asylums; they are not perfect mentally or morally.

Our public schools, our school children, our school teachers, our school officers, our whole system, is a failure.

The Normal School is a failure. What is the mission, the legitimate work of a Normal school? We are told that the State supports it for the purpose of making school teachers. And now what does it do? Why, the faculty, or rather, the want of faculty of that institution, give instruction in Phonics, Zoology, Shakespeare and Spelling—the latter a specialty. And now what do these young men and women do when they have completed their course, when they have correct spelling, etc.? Some of them die, some get married, and, what is worse, a few study law. Occasionally one makes an ass of himself, and is sent to the Legislature. A number try to teach, and fail."

I noticed that the voice of the Grumbler grew feeble, and the last few words came slowly in a half whisper. I looked up to him. His head was thrown slightly back, the short, black pipe had fallen from his lips, his eyes were partially closed, his breath came and went labored and slowly. I saw with a chill of horror that he was passing away. I tried to rouse him. His lips moved as though he would speak. I bent down to listen: "I'm a failure myself," was all I heard. He died and his mantle fell on

GRUMBLER THE SECOND.

A REPLY.

A communication, in the June number of the SCHOOLMASTER, joins issue with our Supreme Court on the question of the qualification of Township School Officers. The article he attacks is a short abstract of an opinion of our Supreme Court, by Justice SHELDON, and may be found on page 176 *Ante*. The author of the article in the June number, certainly did not understand the nature of the article he attacks, or else he does not understand that our Supreme Court is very good authority in this State on all questions of law.

He says, "The eminent (?) jurist who rendered that decision had not read the School Law of 1875, or else he does not understand the meaning of the word *qualify*." This is a grave charge to lay against so eminent a judge as Mr. SHELDON. It is generally understood, in this State, that what our Supreme Court say is the law, *is* the law until reversed by a later decision, or changed by act of the legislature. If Mr. W. will read the decision referred to, he will probably wish he had not sent in his communication.

NEWTON B. REED.

GRAMMAR.

In the June number of THE SCHOOLMASTER appeared an article with the above heading, in which the writer says: "I have sometimes thought that the ordinary work in grammar results in as much harm as good."

I heartily assent to the statement and am confident that Mr. SMITH has not presented half of the difficulties that beset teachers and pupils in attempting to discuss this sadly neglected branch of a common-school education. I ask the attention of the readers of this journal to what Mr. S. is pleased to call "verb-forms."

All text-books define the verb to be a *word*, hence no combination of words can constitute a verb, although it may and does make up the predicate. The English verb appears under four forms, to illustrate which, suppose the word *write* is taken, in which case we shall have *write, wrote, writing, written*,—the first two expressing time, or tense, the last two the state or condition of the act, whether continuing or completed. So the verb itself has but *two* tenses, present and past, the others belonging to the predicate, and made up by the use of the so-called auxiliaries.

"Have written" then, is not a verb, but a predicate, made up of that form of the verb which denotes the completion of the act, combined with the

present form of *have*, which is sometimes used as a principal verb denoting possession, but is here used as an auxiliary, the two words constituting the prior present, or present perfect, tense. The present and past forms of the verb denote time and state; in the other tenses, time only.

Our systems of analysis are altogether too loose when they not only allow, but teach, pupils to call from two to four words a verb, after having taught them that a verb is a word. The statement, "the pupils should learn just what each of these words that go to make up a tense-form is used to indicate," (with the substitution of "*predicate-form*" for "*tense-form*,") cannot be too strongly insisted upon. It is now almost wholly neglected.

If, "a verb is a word by which something is affirmed," may be accepted as a good definition of the verb, it is not easy to discover why the participle and infinitive have found their way into English grammar. CLARK gives the following sentence in which the two participles are made to do duty as adjectives. "*Scaling* yonder peak, I saw an eagle *wheeling* near its brow." If *saw* asserts what *I* was doing with my eyes, why does not *scaling* assert what *I* was doing with my feet and hands as well? And if *wheeling* was a *condition* of eagle, how shall we find what the eagle was *doing*? The fact seems to be that the sentence contains three predicates, two concerning *I*, and one concerning eagle, and there is no necessity for this participle that is everything by turns and nothing long.

A. W. CUMMINS.

Woodstock, McHenry Co., Ill.

OFFICIAL.

The Supreme Court has rendered a decision which is of interest to school officers. We present a condensed statement from the report in the *Western Jurist*.

The case was brought against the school directors of school district No. 1, town 27, Iroquois county, to recover fifty-three dollars, the price of one school set of stereoscopic views, with scope, and elements of geography and history.

The directors gave the plaintiff the following order in payment:

"STATE OF ILLINOIS, }
County of Iroquois. } ss.

October 26, 1871.

"Treasurer of Township 27 North, Range No. 14, in said county, on or before the first day of April, 1872, pay to CLARK, LAKE & Co., or bearer, the sum of fifty-three dollars, out of any money belonging to School Dis-

trict No. 1, in said Township, for one school set of Stereoscopic Views, with Scope and Elements of Geography and History, with interest at the rate of six per cent., and ten per cent. on the amount after due.

PETER BROUILLETTE,
SMART WALKER,
School Directors."

The apparatus was delivered to the defendants, and, after the maturity of the order, it was duly presented for payment, but payment was refused by the township treasurer. The ground of refusal was that the order was void upon its face.

Justice SHELDON stated, in his decision, that the statute prescribes the form of school orders to be drawn by directors on the treasurer of the township; according to this form they are payable neither on time nor with interest

"The order in question is not in accordance with the prescribed statutory form.

It is supposed that although it may not be so, and though no action may lie upon it, yet there may be a liability upon a *quantum meruit*, the school directors having received and enjoyed the use of the property.

The law provides that directors may appropriate to the purchase of libraries and apparatus all surplus funds after all necessary school expenses are paid.

This would seem to be a limitation of the power to make purchases of this kind to the circumstances named, and to be an implied restriction of any power to purchase, generally on credit. There was no attempt or offer to show, that there were any surplus funds after all necessary school expenses were paid, applicable to the purchase which was here made. The order implies the contrary as it is payable at a future day with interest, and out of any money belonging to the school district. Under the evidence offered, we are of opinion that the contract of purchase should be held to be unauthorized and void, and that there should not be any contract implied by law, to pay for the articles, arising from their receipt and use.

* * * * * The plaintiffs' only remedy, in our view, is to reclaim the property itself."

The gist of the decision, then, is as follows ;

"An order on the treasurer of a township by the directors, payable with interest at a future day, in payment for the purchase of school apparatus, is void. Surplus funds only can be applied for such purchases. The receipt and use of the same does not create any legal implied contract."

Or, in other words, only surplus funds can be applied to such purposes. The giving of the note implies that there were no such funds at the time of purchase, hence, the contract was unauthorized by law, and was, consequently, void.

EDITORS' DEPARTMENT.

We begin, in this number, a series of articles on the colleges of our State. The work that they are doing is but poorly understood by the majority of our people. Several of them have passed through the probationary period and have entered the era of assured success. Their history will present a record of devotion to the cause of higher education, that is nothing less than heroic. A few brave souls have struggled through years of unrequited toil, possessed by one absorbing idea—to give to young men and women of the prairies the opportunity of drinking at those fountains of knowledge that flow so abundantly in the older East.

All honor to the good men and true who have toiled through the darkness with no star but hope to guide them!

The best judgment has not always characterized their efforts. Sectarian zeal has sometimes clouded their sky, but generous culture has grown under their sometimes mistaken ministrations, and the community at large owes them a lasting debt of gratitude.

Illinois is emphatically the State of Indian corn. Her interests, material, social and intellectual, flourish or languish with that ubiquitous cereal. Is the season favorable, does the bosom of the storied prairie, in the last week of April and in the early May, warm to the genial heavens, do the clouds opportunely distill their gracious moisture, the countenance of the average voter relaxes its hard lines and smiles in rapturous harmony with earth and sky. Generous impulses are in the ascendant. The party in power is pure and economical. Education is popular. The five per cent. tax is smilingly voted, and good humor and faith in republican institutions are the order of the day.

But reverse the conditions and the consequent results are transformed. If winter is projected into spring, and the laggard spring, with rain and mildew, drags into summer, if the young maize bleaches in the field and the plow rusts in the furrow, then look out for trouble all along the line.

Our institutions are so near the people that they are sensitive to every change in popular feeling. We are in the hand-to-mouth state of existence yet in Illinois. We are one crop behind in most of our enterprises. We are living, not on the harvests of last year or the last score of years, but on the coming harvests. "I'll pay you after I thresh" is the promise of too many purchasers.

It happens, unfortunately enough, that the arrangements for next year's school must be made just about the time that the growing crop takes character; and so it is, that as the corn is so is the school.

This is a bad year in Central Illinois. It has rained with little intermission since the middle of May. There can be no doubt that the crops are a partial failure. About this time, as the almanac makers say, look out for trouble. Farmers are blue. Merchants buy carefully. Mechanics are unemployed. "The schools," say many, "are too expensive."

The temptation to cripple them is very strong. Well, we can wear old clothes. We can defer some purchases that we had intended to make. We can't, however, prevent our children from growing a year older. We can't recover for them a lost opportunity. We ought to be more anxious to raise good men and women than to raise corn. One crop should not fail because the other does.

We cannot afford to cripple our schools. Such years test our mettle. If the public is selfish, that selfishness will come to the surface. We should so believe in these beneficent institutions that we have nurtured in our years of affluence, that we shall not maim them when a little sacrifice will keep them in the full tide of success.

The July *Atlantic* closes its review of the school reports of all the States and Territories with the following language: "The present defects of our public-school system may be briefly summed up. They are an alarming absence of definite moral teaching, and a disgraceful neglect of historical studies; too much elaboration of arithmetic, grammar, and geography, and too little attention to the other elements of knowledge, together with a complete failure to impart any conception of, or taste for, English literature."

The report of a State Superintendent is not the best place to learn all about the practical workings of a school system. The reports may warrant the sweeping assertion with which the extract closes; the facts do not. It is doubtless true that much remains to be done, but it is equally true that Illinois has made something of a start. There are in this State many graded schools, hundreds of them, indeed, having, for their upper department, what

they are pleased to call a high school. The course usually includes some work in the natural sciences, mathematics through geometry, and a term's work on English literature. Many of them have Latin, and once in a while German and Greek find a place in the curriculum.

The work in literature introduces the pupils to the best authors, and in some instances, the course is lengthened to a year, and some of the best works are carefully studied.

Once in a while a teacher is found who has adopted the sensible method of putting Scott's poems or novels, or Dickens, or Wordsworth, or Tennyson's *Queen Mary*, into the hands of a reading class, and three months are spent in a careful analytical study of the work selected. Such drill must give the class such interest in that particular author, that the future will take care of itself.

It is to be feared that we must plead guilty of "too much elaboration (?) of arithmetic, grammar, and geography." The "disgraceful neglect of historical studies" may not be too strong a statement, while the "alarming absence of definite moral teaching," whatever *definite* moral teaching may be, is, it may be supposed, to be proved by the popularity of our reform schools and prisons, as places of resort.

But is not the reviewer expecting too much from the district school? When such schools shall teach the children to read, understandingly, an ordinary selection, to perform the ordinary operations of arithmetic with readiness and accuracy, to speak their mother, or foster-mother, tongue correctly, to write a fair hand, to know where the important countries and chief cities are, and to know the ordinary facts about them, they will be doing a noble work, and one that will commend them to their patrons.

Is not the plan of substituting for the Fifth Reader some interesting book, like *Lady of the Lake*, or *Ivanhoe*, or *The Child's History of England*, worthy of imitation?

The selections of the ordinary fifth book are too fragmentary to be interesting. They are jewels out of their settings, and are, consequently, not appreciated. The experiment has been faithfully tried by the writer, and he is a complete convert to the plan. Some of the results may be stated:

1. The interest of the class is gained. What child can read SCOTT's beautiful poem "The Lay of the Last Minstrel," without being won by the flowing numbers? The teacher should be supplied with a good map of the country where the scene is laid, and, also, with good historical notes. Any edition, of any considerable size, of Scott's poem, will furnish all the notes needed.

2. A standard is furnished by which pupils may measure other books. The sensational story, with all its absurd situations, is pronounced "splendid," because it appeals to the reader with more power than any other book that he has read. Abominations in rhetoric, extravagances in statement, absurdities in plot pass unnoted because they are not seen in their proper colors. If DICKENS, and SCOTT, and TAYLOR, and EGGLESTON, and Miss ALCOTT, and Miss PHELPS, and a host of excellent, but lesser, worthies cannot compete with COBB and BENNETT, and all of their clan, then there must be something fundamentally wrong somewhere. It is useless to sweep a house and garnish it, and leave it vacant. That experiment was tried upon a certain memorable occasion. The good must be substituted for the bad in order to effect a reform.

3. Of course, valuable information is gained; healthful tastes are formed; pupils are started in the right direction; a love for the chaste and simple is engendered, and children are introduced into the vast literary fields of our language in such a way as to make them feel that there is something there that they want.

Teachers should have a clear idea of what the common schools ought to do for the children. By the common schools, in this connection, we mean, more particularly, the country schools. It should be borne in mind that their work is with the rudiments. When a teacher applies for a country school, the question should not be, "can you teach algebra or physical geography? but, "can you teach children to read, in the least time possible?" These teachers are apt to pride themselves upon having a pupil or two in some one of the higher branches, and more time is taken to accommodate such a class than a dozen beginners receive. This is very bad. Let it be understood that he is the best teacher who can give the most thorough *drill* in these primary studies; that the higher studies are intruders just to the extent that they interfere with these branches; that the teacher's duty is to *drill*, DRILL, DRILL, upon reading, arithmetic, geography, grammar, penmanship, history, and spelling.

We have always supposed that Agricultural reports have some sort of a mission. Exactly what it is we have never attempted to discover, but have usually assigned it a place among the other unfinished and inscrutable problems with which the universe is crowded. They are usually found upon the waste places of country-inn book-shelves, or stare in pathetic loneliness from the dark corners of garrets. But here comes the Monthly Report of

the Department of Agriculture for May and June, 1876, and it is crowded with items of interest to most, and especially to teachers. There is a mass of material that may be easily worked into entertaining and instructive general exercises for schools. If this sort of thing continues, the patent-office reports will soon be in demand for circulating libraries. Here is an item as a specimen. The increase of corn production in Kansas is as follows: Crop of 1874, sixteen millions of bushels; of 1875, eighty millions of bushels. Who has any definite notion of the amount of corn raised annually in the country? For the four years closing in 1874, the average yield was almost a *billion bushels*, or nearly a bushel apiece for all the inhabitants of the globe, while the wheat crop for the same period averaged about one-fourth as much. Suppose this yearly corn crop were stored in the regulation style, that is, in a crib, about ten feet wide and the same height. The crib would be about twenty millions of feet in length, or about three thousand eight hundred miles. It would take about a week's ride on an ordinary express train, going night and day, to traverse its length. But this isn't the best, or the worst, of it. About nineteen twentieths of this monstrous crop is consumed in the country.

This report contains several charts, by which the relative productiveness of different states, and other comparisons, are shown by varieties of coloring, or length of lines.

In the year 1869, the average inhabitant of Iowa raised about fifty-seven bushels of corn; ditto in Illinois, followed with about fifty-one, while the line, showing the relative production of Massachusetts, wouldn't make a respectable nonpareil period.

A respectable pop-corn vender of our acquaintance says, "The more corn you have, the more brain you *must* have,"—a statement to which the Boston people would hardly agree.

In the production of wheat, Minnesota leads the van, with forty-three bushels *per capita*; California follows with thirty; Illinois shows a shade less than twelve; four produce none, (which are they?); Louisiana has about a quart, if a little widening of the base line in the diagram means anything.

The chart on the cotton crop for ten years is equally interesting, and shows suggestive relations between the crops and their money value.

The diagram, showing the relative yield per acre, tells some unexpected news. This covers the period 1865-1874. In wheat, Nevada stands first; Massachusetts, third; Minnesota, fifth; Illinois, *twenty-first*. But we raise corn in Illinois, and in that we can, of course, beat the world.

Let's see! California stands at the head; the "Old Granite State" stands third; Illinois is number twenty in the list. So little Vermont, with her barren hills and stony soil, yields more corn to the acre than Illinois. Put a thrifty Vermonter upon a western farm, and he will raise more corn in a twenty-acre lot than an ordinary prairie farmer on twice as much.

So the immigration charts, and tables showing relative value of wages, are instructive, and contain much valuable information, which the wide-awake teacher can utilize.

Knox College is reaping the reward of its wise action in appointing Dr. BATEMAN to the Presidency.

Like too many institutions, it had fallen into a condition that augured nothing but evil for its future. Its friends were despondent; there was little sympathy between Faculty and students; old feuds were nurtured:—in brief, Knox was on its way to ruin.

The appointment of Dr. BATEMAN was an inspiration to all its varied interests. Its friends took heart; old enmities were buried; old feuds were forgotten; the college entered upon its upward career.

The common-school teachers of the State were at once won to its support, when their honored leader was called to its head, and a feeling of sympathy was at once established with the feeders of colleges, that must prove of great benefit to Knox. What it now needs is pupils. Its halls should be thronged at the opening of the next year. When a teacher finds among his pupils those who bear the unmistakable marks of power, he should encourage them, in every way possible, to neglect no opportunity, and never rest satisfied until the yearning for liberal culture shall have lead them to some of these institutions whose doors stand open before them. Poverty is no excuse. The poor will find warm sympathy, and ready hands to aid them. The financial status of Knox is much improved, as thirty thousand dollars have been added to its productive funds. If its friends rally to its support with the earnestness that is deserved, it will enter upon a career of usefulness and power hitherto unexampled in its history.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

The following is the complete report as amended and finally adopted by the special committee of the Board of Education on the subject of changes and retrenchment in school management in Chicago. The report was finally adopted June 20, 1876.

First.—That after the present fiscal year, the Board accept no interest from or upon school funds in the hands of the School Agent.

Second.—That it is the sense of this Board that the Principals of the Grammar and Primary Schools, and the Head Assistants of the Division High Schools, should devote a greater proportion of their time than at present to teaching, and that the Superintendent and the Committee on the Appointment of Teachers be requested to so arrange that the Principals shall spend from one-third to two-thirds, at least, of their time in instruction as in their discretion may seem practicable.

Third.—That the Superintendent shall have power, in his discretion, to unite in one school the two highest grades of two or more schools in which there is not a sufficient number of pupils to fill a room.

Fourth.—That in all school buildings having the average number of sixty-three seats to a room, there shall be but one teacher employed in each room.

Fifth.—That the Normal School be relegated to, or made a Department of, the High School and that one or more of the teachers of the Normal School be dispensed with, as in the judgment of the Superintendent may seem proper.

Sixth.—That the property on which the Scammon School is located be sold or leased, and that the Normal School building be used for the Scammon School.

Also the following schedule of salaries for the ensuing year:

OFFICERS.

Clerk of the Board.....	\$2350
Building and Supply Agent.....	2250
Attorney of the Board.....	2350
School Agent.....	800
Assistant Clerk.....	900
Assistant Clerk, including care of rooms.....	900

SUPERINTENDENTS.

Superintendent of Schools.....	3800
Assistant Superintendent of Schools.....	3000
Superintendent of Music.....	1500
Superintendent of Drawing.....	1500
Superintendent of German.....	1900

TEACHERS OF HIGH AND DIVISION HIGH SCHOOLS.

Principal of High School.....	2700
Principal of Normal School.....	2900
Principals of Division High Schools, each.....	2100
Principal of School of Practice.....	1200
Four Assistants, each.....	1800
Four Assistants, each.....	1600
Two Assistants, each.....	1900
Balance of Assistants, each.....	900

PRINCIPALS OF GRAMMAR SCHOOLS.

Principals of Grammar Schools having more than twelve rooms, for first year of service as Principal, \$1500; for second year, \$1600; for third year, \$1700; for fourth year and thereafter, \$1800. Principals employed from outside the city shall receive such compensation, not exceeding \$1800 a year, as the Board shall determine at the time of their action.

Principals of Grammar Schools having twelve rooms, for first year of service as Principal, \$1200; for second year, \$1300; for third year, \$1400; for fourth year and thereafter, \$1500.

PRINCIPALS OF PRIMARY SCHOOLS.

Principals of Primary Schools having twelve rooms, for first year of service as principal, \$850; for second year, \$950; for third year and thereafter, \$1050.

Principals of Primary Schools having less than twelve rooms and more than six, for first year of service as Principal, \$800; for second year, \$900; for third year, and thereafter, \$1000.

Principals, or Teachers in charge of schools having less than seven or more than four rooms, \$100 per annum more than the salary of regular teachers.

Principals, or Teachers in charge of schools having less than four rooms, \$50 per annum more than the salary of regular teachers.

Provided, that not less than fifty nor more than seventy-five pupils shall be counted as a room.

PRINCIPALS OF LAWDALE AND WICKER PARK SCHOOLS:

Principal of Lawndale School.....	\$ 900
Principal of Wicker Park School.....	1000

HEAD ASSISTANTS:

Head Assistant of Division High Schools.....	\$ 900
All other Head Assistants, for first year \$750; for second year \$800; for third year, and thereafter, \$850.	

ASSISTANTS IN GRAMMAR AND PRIMARY SCHOOLS:

For first year, \$450; for second year \$550; for third year, \$650; for fourth year, and thereafter, \$700.

Teacher of Deaf Mutes.....\$ 800

A motion to abolish the offices of Superintendents of Music and Drawing was rejected by a vote of 10 to 2.

In the matter of salaries, those who suffer most are the Superintendents of Music and Drawing. Their salaries have been reduced from \$2,000 to \$1,500 per annum. The one who suffers least is the Assistant Superintendent. His salary remains at \$3,000 per annum.

For some reason or other the teachers of Chicago have not this year been elected at the time appointed by the rules of the Board of Education. The same thing happened last year. It is not the most stimulative incentive imaginable for a pleasant vacation, to leave the city with the possibility ever impending of finding one's occupation gone on his return.

Some unknown correspondent has sent to our desk the following recipe and conundrums. They are all respectfully submitted to whom they may concern :

Recipe—To promote the efficiency of a High School. Establish the scholarship standard of teachers for positions therein at 75 instead of 95, or 100.

Conundrum I.—If proper questions are asked, is there by this plan any guaranty of getting more than three-fourths of a man, or even three-fourths of a woman ?

Conundrum II.—Which, on the above supposition, is the missing quarter ?

Conundrum III.—If there is a written and published rule that teachers shall be elected before the close of the summer term, how can any one decently excuse the present (like the past) dilatory action ?

The examination for admission to the Chicago High School took place 20th of June. 819 candidates presented themselves on that day, of whom 775 were successful in reaching the required average—70 per cent. Very nearly 800 of the applicants were members of the grammar schools. The examination for admission to the High School is open to all. Of 44 candidates who failed, 10 were not in attendance at the grammar schools. The number of failures by grammar school candidates, though very small, is larger than for some years past. The number of successful applicants is very much greater than on any previous occasion.

"Dead-lock" is what the newspapers call it now. The Cook County Board of Education consists of eight members, at the present writing, and up to this time several meetings have been held, at which ballots have been had for the Principalship of the County Normal School. Only two candidates were nominated, D. S. WENTWORTH, the present incumbent, and W. F. PHELPS, Principal of the State Normal School at Winona, Minnesota. The ballots have stood, WENTWORTH, 4, PHELPS, 4. Whether the opposing hosts, like the politicians, will finally fall back on the "Great Unknown," or take the sage and characteristic advice of the *Tribune*, and reduce the

salary of the position one-half, and then close up the school, the future will determine. By the way, in stating for the education of its readers, the enormous extravagance of the salary attached to that Principalship, we should give the *Tribune* some credit for having exaggerated the same *only* 16 2-3 per cent.

The present peculiar "exigency," is what the financial situation is frequently called. Demands are made for sacrifices on the part of public servants, especially teachers, until "this exigency" has passed.

The financial difficulty in Chicago all arises from the fact that a portion of the property holders do not pay their taxes. The city has incurred no debts unprovided for in the annual tax levies. Money has been borrowed only in anticipation of taxes already assessed and to be collected.

The fact that some people do not pay their taxes is to be explained by the laxity and imperfection of the revenue laws. The "tax-fighters" of Chicago are not a necessitous or poverty-stricken class. They are a class of wealthy, shrewd and selfish men, who instead of patriotically participating in the conduct of municipal affairs, have haughtily left them to be transacted by other, sometimes, inferior and dishonest men.

The present tendency is to treat these men, thus unpatriotic, rich and selfish, with too much lenity. By the impunity with which they have escaped the burdens that other citizens have borne, by the influence of their example, which, appealing to the selfish instincts of humanity, has swelled their number, and by the injustice which their exemption for years has exhibited, these "Taxfighters" have embarrassed and crippled the municipality. Would it not be better for the local Solons of the city to turn their attention to these people, "the cause of all our woes," and devise ways and means to compel them to fulfil their contract with the city, and pay for the protection and prosperity which it has afforded them, than to reduce the salaries and otherwise impair the efficiency of institutions and systems that cannot be rebuilt in a day, that a few wealthy "tax fighters" and their imitators may escape their just share of the public burdens? There is no reason why all the citizens of Chicago should not pay their taxes like the rest of mankind, and "this exigency" is a fraud and a humbug, invented to shield selfish greed and traitorous cunning.

One of the most intricate educational problems of this day and generation, is to provide something for the Chicago Grammar School Principal to do. The newspapers asseverate that he is a "gentleman of elegant leisure," given to forming "pernicious associations" with his fellows, and abound in inferences that time must hang heavily on his hands, now that he has no corporal punishments to inflict. The Board of Education has, also, at times, grappled with the problem, and indicated its acknowledgement of not only the difficulty of the solution, but the momentous necessity of that solution. The first formal attempt of the Board to solve the difficulty was the adoption of a resolution as long ago as Dec. 10th, 1875. This resolution provided that "all books authorized to be used in the schools shall be

furnished by the publishers to the principals of the different schools, at the wholesale rates agreed upon by the Board, and that such principals shall sell the same to the pupils at such wholesale prices, and return the proceeds to such publishers, or their agents; provided, that this Board shall in no case be liable for any loss arising thereby."

It is probable that this proceeding was calculated to do even something more than provide work for principals. It is well known that long and exclusive devotion to pedagogical work has a tendency to make men rather rusty in business matters. Here, now, was an admirable opportunity for the cure of this difficulty. The pedagogue who retailed all the books used by the 1500 to 2,000 different pupils in his school during the year, and returned the proceeds promptly to the publishers, or their agents, would have a business experience that might be very valuable in case some future and less appreciative Board concluded to dispense with his services. The propriety of this action from an educational point of view, may not be very obvious, but from a benevolent or philanthropic point of view, that cannot be said.

The next effort of the Board to solve the difficulty is found in the unanimous recommendations of a recent committee, that the Principal be required to take entire charge of a room, the same as the assistants, in addition to his other duties. To summarize, the present official specified duties of the Chicago Grammar School Principal embrace among many others the following items:

1st. A constant study of the best methods of management, instruction, and discipline of his school.

2nd. The reception and examination of all applicants for admission to the school. This involves knowledge of, and inquiring into, the pupil's residence, vaccination, cleanliness, clothing, and freedom from contagious disease.

3rd. A thorough examination of each pupil that passes from one grade to another. This examination must be both oral and written, and must extend to all branches required to be taught in the grade.

4th. Supervision of the work of his assistants.

5th. Attending to all cases of special discipline.

6th. The attainment of a healthy, moral tone throughout the school.

7th. The awakening in both teachers and pupils, of enthusiastic devotion to their work.

8th. Personal attention to the health and comfort of his pupils.

9th. Meeting together the first Saturday of each school month, and at such other times, out of school hours, as the Superintendent may choose, for counsel with the other Principals and with the Superintendent.

10th. Reporting to the Board of Education upon the Monday succeeding the close of each school month and annually, the condition of his schools in accordance with the requirements, upon blanks furnished for the purpose.

11th. Keeping such a record as will show the name, nativity, parent's or guardian's name, residence, age, date of admission, and date of discharge

of each pupil; the whole number of different pupils enrolled; the average membership; the average daily attendance, and the number of tardinesses.

12th. Keeping a record of books, provided by special funds bequeathed for that purpose, loaned to indigent children. This involves an examination of the applicant's need and worthiness, and to be accomplished with becoming delicacy, should not be done by wholesale, or with unnecessary haste or publicity.

To give an idea of the nature of some of these duties, it may be mentioned that the average number of different pupils enrolled in a grammar school in Chicago is more than 1500. The number of pupils admitted by the principal on transfer cards from other schools, from outside the city, or readmitted on explanation of absence, etc., is not less than 150 per month. This kind of work involves a vast amount of necessary intercourse with parents, and, well done, is the most valuable and effective work the principal can do.

The number of promotions for this year will range from 800 to 1500 per school, that is from 80 to 150 per month. It is in these examinations for promotion that the teaching power of the principal is chiefly felt. Teachers in all grades work to meet the principal's requirements for promotion. And since one of the definitions of teaching is "correct questioning," the good influence of new, judicious, and progressive examination-questions cannot be exaggerated. As a matter of fact it is very questionable whether the principal's class instruction, with the interruptions and postponements to which it is constantly liable, will compare favorably with that of the average assistant who has nothing else to do or think of.

13th. Selling all books required by pupils at wholesale rates. This presumably involves the buying of stock to be retailed. At any rate the amount and kind of work it imposes may be inferred from the number of different pupils and promotions per school given above.

14th. Returning the proceeds of such sales to the publishers or their agents.

15th. Teaching from one to two-thirds of the time embraced in school hours. It is hardly a vigorous inspiration for the work involved in this item, that two-fifths of the Board of Education are on record as believing that three-thirds of this time should be so spent.

We refrain from further enumeration of the Chicago grammar-school principal's already specified official duties. Perhaps if a committee were organized, composed of a few daily newspaper editors, whose minds were never irreparably "narrowed" by pedagogical influence, a few "reform" and "machine" politicians, with mental characteristics of the same happy order, and a contribution such as the Board of Education from its experience and investigation might make to such a committee, this great problem might be solved, and *something* be provided for the Chicago grammar school principal to do!

EDUCATIONAL INTELLIGENCE.

SPRINGFIELD, JULY 1, 1876.

EXAMINATIONS FOR STATE CERTIFICATES.

Notice is hereby given that examinations will be held at the following places on the 23d, 24th and 25th of August, 1876:

At Carthage, Hancock County. Board of Examiners: Rev. D. L. TRESSLER, L. F. M. EASTERDAY, E. F. BARTHOLOMEW, J. PIKE; WM. GRIFFIN, Conductor.

At Dixon, Lee County. Board of Examiners: H. H. SMITH, E. C. SMITH, O. G. MAY, C. C. SNYDER; DAN'L CAREY, Conductor.

At Champaign, Champaign County. Board of Examiners: O. C. PALMER, J. W. HAYS, I. N. WADE, J. C. PICKARD; S. L. WILSON, Conductor.

At Geneseo, Henry County. Board of Examiners: I. F. EVERETT, CHARLES RILEY, I. A. MERCER; B. F. BARGE, Conductor.

At Carbondale, Jackson County. Board of Examiners: A. C. HILLMAN, G. T. FOSTER, HELEN M. WHITE; L. L. REDD, Conductor.

For particulars, address the State Superintendent.

Clay County.—Prof. JAMES H. BROWNLEE, of the Southern Illinois Normal University, will hold a County Normal School at Flora, Illinois, commencing July 31st, 1876, and continuing four weeks. We deem it unnecessary to urge upon teachers the importance of attending this Institute, as no effort will be spared to make it of the greatest benefit to the teachers, and through them to the schools of the county. A thorough course of instructions will be given in all the branches that the law requires for a first-grade certificate. In order to avoid unnecessary expense, teachers will bring such text-books as they may have. Arrangements will be made to furnish teachers new books at reduced rates, if those needing such will inform me, before the commencement of the Institute, what kind they want. I would recommend "DALTON's Physiology," GRAY's "How Plants Grow," and TENNEY's "Elements of Zoology," as the best suited to our work in the "Higher Branches," and would advise teachers desiring to take up these studies, to procure them. These books can be obtained at the Institute at reduced rates. Bring with you a good supply of paper, pens, ink, dictionaries, etc.; also slates and pencils.

Tuition for the term, \$3.00. Board can be obtained in Flora and vicinity, at very reasonable rates. I should like to have those who contemplate attending to so inform me by postal card or otherwise at an early day so that complete arrangements can be made.

Teachers of Clay county, this is a rare chance for improvement. Use your influence to have all attend. Let us go FORWARD! The corps of instructors is a sufficient guarantee of success. The instructions will be suited to any, whether teachers or not. An examination for Teachers' Certificates will be held at the close of the term. For further information, address,

GEORGE W. SMITH, Co. Supt. of Schools.

Sangamon County.—A County Normal School will be opened in the High School Building, on Monday, the 17th inst., and will continue six weeks. The branches taught in the public schools will be thoroughly reviewed, and the sciences required for a first grade certificate will receive careful attention. Teachers who desire to improve, and also those who wish to pursue a short and comprehensive course of study, will do well to avail themselves of the opportunity thus offered. The school will be under the charge of P. J. Rourke, Sup't Co. Schools, and Andrew M. Brooks, Sup't City Schools.

P. J. ROURKE,

Sup't County Schools.

Champaign County.—The Centennial of the Nation brings us to the Seventh Annual Session of our Normal School. It will open on Monday, August 14th, 1876, and continue three weeks, in the High School Building in East Champaign. Its success hitherto has been unparalleled. A lively interest has been manifested by

the best teachers of the county and community. The quality of the instruction is the best. An increasing demand on the part of our people for *skilled labor* in the school-room, is sufficient inducement to press onward. We are happy to announce that Prof. W. B. POWELL, of Aurora, who worked so faithfully and won so many plaudits last year, will give instruction in Language and Zoology; that Prof. JOHN W. COOK, of Normal, will teach Arithmetic and History, and Prof. J. C. PICKARD, of the Industrial University, will teach plain reading. Others have been invited and will make short stays with us, but the three aboved named will stay throughout. ANDREWS' "Manual of the Constitution" will be the text in History. All teachers and persons who expect to become teachers, should attend. It is not only your privilege—it is your duty. Advanced pupils in the country and graded schools will find it profitable, and any who expect to enter either of the State Universities can thus review for examination. An examination for certificates will be held at the close, beginning Thursday, August 31st, at 8 o'clock, a. m. Persons from other counties are cordially invited to attend. Bring your text-books and Bible. Board can be secured at reasonable rates. Good opportunities offered for clubbing. Tuition, one dollar per week, payable in advance. For further information address, S. L. WILSON, County Superintendent of Schools, Champaign, Ill.

Jo Daviess County.—The Jo Daviess County Teachers' Institute will (according to a vote taken at the last Institute) be held at the City of Galena. It will commence on Tuesday, the 22d day of August, A. D. 1876, at 9 o'clock, A. M., in the High School Building, and continue to, and including, the 1st of September.

Teachers of Jo Daviess, it is for your improvement these Institutes are held, and it is your duty to attend them, not only a part of the time, but during the entire session. Do not neglect to bring note, as well as text-books. Remember to accomplish the work of an Institute in the best way, the teachers must be active workers in them, and not mere passive listeners. You cannot maintain a proper standing, or receive the patronage of the community, if you do not keep up with the times.

ROBT. BRAND, Co. Supt.

Ogle County.—The Teachers' Drill for 1876, will be held at Rock River Seminary, Mt. Morris, commencing August 1st, and closing August 24th. Classes will be formed in each of the branches required of teachers in obtaining certificates, and members can enter such classes as they select. The instruction will be thorough and given by President EDWARDS, S. A. FORBES and HARRIET CASE, of Normal; M. L. SEYMOUR, Blue Island; the Superintendents of DeKalb, Winnebago, Carroll and Whiteside counties; N. C. DOUGHERTY, ARTHUR EDWARDS, JOHN PARR, P. R. WALKER, J. T. RAY, S. B. WADSWORTH, B. S. HEDGES, Mrs. F. E. CRAWFORD and others of our own county.

The County Board of Supervisors has provided for the incidental expenses of the session, and for the undersigned to spend his time in giving methods of instruction, examinations, etc. A tuition fee of \$3.00 each will be charged to defray the other expenses of the drill. The expense of boarding may be so small, that teachers can well afford to pay this tuition fee for the services of those that will be of so great aid to them. The use of sixty rooms in the Seminary buildings, each provided with a table and headstead, will be given, rent free, to those that wish them. Members can have their food cooked for them at fifty cents each, per week, or can board in clubs at \$1.50 to \$2.00. Board with furnished rooms, with private families, \$3.50, and at hotels, \$4.00.

All persons intending to be present are requested to notify me at once, and if assistance as to boarding is desired, to so inform me. Teachers should take such text and reference books as they have, with Bibles, slates, stationery, etc.

E. L. WELLS, Co. Supt. Schools.

Morgan County.—The Summer Drill or Normal School will begin August 15th, and continue two or three weeks. There will be daily drill in the common branches and school government. The sciences will not be neglected. Especial attention will be given to Reading, Arithmetic and Grammar. Lectures will be given during the session by some of the best educators. Terms, \$1.00 per week. Bring your text-books for study. No particular book required. HARRY HIGGINS Co. Supt.

Iroquois County.—The Normal Institute, of four weeks, will be held at Sheldon, Iroquois county, commencing July 24th, 1876. This Institute will be under the immediate supervision of Superintendents NEISZ, of Kentland, and KERR, of Gilman. Every common school teacher in this and adjacent counties should avail himself of this opportunity to brush up before the fall examinations, and for the labors of the coming year.

Vermilion County.—The third year of Vermilion County Normal School, is to be held at Danville, Illinois, commencing Monday, July 24, and continuing six weeks. Tuition, \$1.00 per week, payable in advance. The course of study will embrace all the branches upon which applicants are required to be examined for a first grade certificate. Persons attending this school are requested to bring any text-books they may have. A full corps of efficient teachers has been secured. An examination of applicants for certificates will be held the last three days of the term.

Good board can be secured at reasonable rates. Those desiring further information, may address either of the undersigned, at Danville, Illinois.

C. V. GUY, Co. Supt., C. M. TAYLOR, Supt. Danville Pub. Schools.

Marshall County.—A Normal for Marshall, La Salle, Livingston and Woodford counties, will be commenced at Wenona, Ill., July 10th, 1876, continuing six weeks. Tuition in Grammar Department, \$3.00; Tuition for County Certificates, \$5.00; Tuition for State Diploma, \$7.00. Competent teachers are employed for the work. State examinations at Dixon, August 23, 24, and 25. For further information, address,
J. A. HOLMES, Wenona, Ill.

Edgar County.—Teachers' Normal Institute. A Normal Institute for the instruction of teachers and those preparing to teach will be held in the High School Room, Paris, Illinois, commencing July 24th, 1876, and continuing five weeks.

The course of instruction will be adapted to the immediate and pressing wants of the teachers and schools of Edgar county, and arrangements have been made for such assistance and appliances as will secure success to the enterprise.

It is designed to afford such instruction as will prepare those attending, for certificates of the first and second grades, and at the same time suggest approved methods of conducting schools and class exercises. All subjects required to be taught in the schools of the county will receive appropriate attention, and no pains will be spared to make the term every way advantageous to those in attendance.

This Institute has been undertaken at the earnest solicitation of the County Superintendent, who will be present during the sessions, and will grant certificates to such as are found worthy to receive them at the close. Those who mean to attend will confer a favor by notifying me of their intention as soon as practicable, and the grade of studies they desire to pursue. Any text-book in general use will answer every purpose. Expenses: Tuition for the term, \$5.00; Board, per week, \$3.50 to \$4.00. For further particulars, address R. S. CUSICK, County Superintendent, or the undersigned.
A. HARVEY, Supt. Pub. Schools, Paris, Ill.

Henderson County.—OLENA, ILL., June 24th, 1876.—EDITORS SCHOOLMASTER: The Henderson County Institute will open at Oquawka, July 24th, and will continue four weeks. It will be conducted by Prof. J. M. AKIN, and Miss S. E. CHAPIN. All the branches required for a first grade certificate, and pedagogics, will receive attention. The "Teachers' Institute Association" will meet at the same place, August 21st, and will hold a four days' session. Centennial exercises will be connected with our usual drill.
J. M. ARTHUR, Co. Supt. of Schools.

Cumberland County.—Our Normal Institute for this county this year, will be held at Prairie City. Will commence Monday, July 24th, and continue six weeks. The school will be in charge of Prof. M. SPERRY, one of the oldest and most successful teachers in this portion of the State, assisted by Mr. T. S. MOORE. It is intended, by means of lectures and practical drills, to give instruction in all the common branches and especially in the most approved methods of teaching. C.

Christian County.—TAYLORVILLE, ILL., July 6th, 1876. EDITORS SCHOOLMASTER:—We will hold our regular "County Teachers' Institute" in Taylorville,

commencing on Monday, August 28th, and continue one week. I expect to call a county convention of school directors to meet in Taylorville, Saturday, September 2d. State Superintendent *ERRER*, will be with us at that time. Our people are taking an active interest in our schools; teachers are well paid for their services, and have been doing good work. In addition to our "County Institute" which is held once a year, we hold local Institutes in different parts of the county during the school year. These are well attended, not alone by teachers, but by the citizens generally. Wages in our district schools range from \$40 to \$65 per month. Principals in graded schools receive from \$90 to \$115 per month.

R. W. ORR, Co. Supt.

Hancock County.—Third Vacation Normal Class Drill, and drill for State Certificates, at Carthage College, by President *TRESSLER* and Professors *EASTERDAY*, *RICHARD BARTHOLOMEW* and *WM. GRIFFIN*. Having been requested by many to hold a drill this year for both County and State Certificates, and having permission from the State Superintendent to announce for State Examination on August 23, 24 and 25, we will commence the 18th of July, and close the 18th of August. County examinations 18th and 19th of August.

Five Dollars will be charged for instruction in the branches required for County Certificates. Eight Dollars for instruction in the branches required for State Certificates. Instruction will be given by the County Superintendent of Schools, in regard to arranging, classifying and successfully conducting "Country Schools."

Boarding at the College Dormitories, including rooms, bedsteads, mattresses, tables, chairs, etc., at \$2.50 to \$3.00 per week; rooms furnished as stated above, at 50 cents per week. Boarding in private families from \$3.50 to \$4.00. We expect the State Superintendent to deliver one or more addresses to the teachers. For further particulars address,

WM. GRIFFIN, Co. Supt. of Schools

Marion County.—The County Teachers' Institute, for this year, commences on Monday, July 31st, and continues four weeks. It is to be held at *Odin*. Those who cannot attend the Institute will take notice that the examination for certificates will be held on Thursday and Friday, August 24th and 25th, and as I expect to be absent from the county for a month or more immediately after Institute work is over, no more examinations will be held until December. Good accommodations in private families including board will be furnished at the rate of \$3.50 per week. Tuition, \$2.50 for the term. Instructions given in all branches required in first grade certificates.

J. W. PRIMMER, Co. Supt.

PERSONAL.

B. S. HEDGES, of the last Illinois Normal Class, takes charge of the *Rochelle* High School next year.

Dr. EDWARDS read a paper on "The Past, Present and Future of Normal Schools," at the Baltimore meeting of the National Association.

FRANK MATTHEWS continues in charge of the *Toulon* Schools. He has held his present position five years.

S. S. WOOD, who has taught at *Wyoming* for two years, has accepted the principalship of the *Princeville* (*Peoria Co.*) Schools.

O. F. MCKIM, who was formerly Superintendent of *Macon* county, and for a long time a teacher in the public schools of *Decatur*, succeeds *Mr. GOWDY* in the principalship of the *Wichita, Kansas*, schools.

CHARLES L. RAYMOND, of *Bloomington*, has been appointed to the principalship of the *Mason City* Schools.

The *Independent*, of that town, which paper, by the way, has only good words for the schools, gives him the following good-natured send off:

We take pleasure in introducing to the people of this school district, Mr. CHAS. L. RAYMOND, who has been engaged as Principal of our public schools for the next term. Mr. RAYMOND was formerly a teacher in this county but latterly has been engaged in the legal profession in Bloomington. He is well versed in Latin, German and French, and in all other particulars is a first-class scholar. As a gentleman and scholar he is endorsed and recommended by County Superintendent BADGER and Prof. W. H. WILLIAMSON.

JAMES S. STEVENSON, an old Illinois teacher, is principal of the Clay School, in St. Louis. He has an average attendance of nine hundred pupils.

The *Globe-Democrat* gives a pleasing account of the exercises at the close of this school.

We clip the following from the *Watseka Republican*:

Prof. S. G. HALEY, an experienced and practical teacher, of DeKalb county, this State, we learn has been engaged as principal of our public schools for the ensuing year. He comes highly recommended, having been educated at one of the best academies in New England and at Dartmouth College, and having taught several years in New England and five years in this State.

W. S. MILLS, who last year had supervision of the Grammar Department of the Model School in the Illinois Normal, has been appointed principal of the West Side school at Joliet.

Dr. ROBERT ALLYN of the Southern Normal is East, doing the Centennial.

MARRIED.—Wednesday evening, July 12th, 1876, at the residence of Dr. E. WOODRUFF, Savanna, Illinois, W. A. EVANS and MAGGIE WOODRUFF.

So say the cards. The SCHOOLMASTER wishes happiness and prosperity to these deluded friends, who have rashly followed the example of their ancestry.

BUSINESS ITEMS.

ZELL'S ENCYCLOPEDIA.—New and revised edition with maps. The more we see of this practical and universal library, the more strongly we are convinced every one should make strenuous efforts to procure a copy of it. And to accommodate all, we understand arrangements have been made by which responsible persons can order complete bound sets of it, and pay \$5.00 per month. Address the general agent, J. W. MARSH, 722 North 4th Street, St. Louis, Mo.

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ILLINOIS TEACHER,
Volume XXII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

SEPTEMBER, 1876.

NUMBER 100.

PSYCHOLOGY VI.

Do we get immediate knowledge through all the senses? If we touch a hard body, we get at once a certain kind of knowledge—the knowledge of hardness. It comes to us directly, not in any roundabout way. We are also certain that the quality belongs to the body. We are in no doubt about this. If we touch a piece of steel, and feel the hardness of it, we do not make the mistake of attributing the hardness to some other body. But with some of the senses, as hearing, the case is different. I hear a sound, and call it the sound of a bell at some distance. But I may be in error. It may come from some other body.

Knowledge indirectly acquired. When I hear a bell, as we say, why do I know or believe that the sound comes from that particular object? How do I know that it does not really come from some other object? Is there any certain, direct evidence in the sound itself that the bell made it? There is no such evidence. But I have heard that, or a similar sound, before. And it has been in connection with a bell. Many times, when the sound has come to my ears, my eyes have shown me a bell in motion. Nor have I ever had reason to think that any other object caused the sound in any case when I have heard it. I believe that it is a bell, therefore, not because there is anything in the sound itself that directly compels me to believe it, but because I remember what I have previously learned about it by means of the other senses.

What is directly heard. What is directly heard is the sound caused by the vibration of the air against the drum of the ear. We do not strictly hear the bell, or the carriage, or the bird that sings.

Power of Sound over the Mind. Perhaps we shall do well to notice here the power of sound over the mind. Musical tones, the sound of the human voice, the cries of animals, affect us very strongly. This is partly owing to the fact that most of our intercourse with our friends and our

loved ones is carried on by means of sound. Sounds, therefore, become associated with the best and deepest feelings of our hearts. A mother becomes accustomed to the cry of pain uttered by her child, and whenever she hears that sound afterwards, it awakens a similar feeling. But, besides this, there seems to be an adaptation of sounds to the mind, of such kind that they naturally arouse the feelings. A cry of joy from a human being of whose language we are totally ignorant is perfectly intelligible to us. We do not need articulate speech to enable us to interpret it. Sighing and laughter belong to no particular language. They are understood by a natural instinct. On this ground all nations and tribes of men speak the same dialect. And the same thing is just as true of animals.

Number of Sounds that can be Heard. Dr. Thomas Reid says that the ear can distinguish five hundred different degrees of pitch in sounds, and in each degree of pitch, five hundred degrees of loudness. This makes altogether two hundred and fifty thousand different sounds that may be distinguished by a person of ordinarily good hearing.

What we get in Sight. When we look at an object, and have the help of light, and an unobstructed view, what do we really see? Which of its qualities are made known to us by vision? This question is a difficult one to answer, because, in using any of our senses, we call to our help at once any and all knowledge that we may happen to have, that is at all a help to us. This we saw in what was said about hearing. We know that the sound we hear comes from the bell, because we remember what we have previously observed. That is, the perception is helped by the memory. Now when we look at an object, it is hard to tell whether the knowledge we get comes through the eye, or from the memory. I look at a table, and conclude that it is a flat surface, so many feet in length and so many in width. How much of this does the eye alone tell me?

Does the eye give us Length and Breadth, etc.? We certainly cannot tell the exact number of feet in the length of a table by the sight alone. If I am able to determine that by the eye, as we say, it must be because I remember the length of a foot, as I have seen it before. So it is certain that the memory helps us to see the exact length and breadth of a surface, or the exact length of a line.

But the seeing the exact length or breadth of a surface is one thing, and seeing that it *has* length and breadth is another thing. Does sight teach us that a surface has extension, i. e., length and breadth? In other words, does sight give us a knowledge of extension? Most persons would at once say that it does. It seldom occurs to an ordinary man that it is not

by sight that he gets knowledge of the extension and form of the things he sees. But many philosophers think otherwise. Some hold that originally extension is perceived only by *touch*, and that we *learn* to perceive it by sight only after much experience, and by the use of memory. The process is something like this, as the philosophers think; at first we learn extension by touch, and then we see with our eyes that a body having a certain extension presents a certain appearance. Then, afterwards, whenever that appearance is seen, we conclude that the same extension exists. The eye, although it does not perceive the extension, does perceive the appearance that always goes with it.

Sight alone gives us a knowledge of Color. But there is no doubt that sight alone gives us a knowledge of color. Without sight we should never have any idea what color is. A man born blind cannot have this idea, and cannot acquire it. If such a man learns to distinguish colors it is by some accidental circumstance attending it. He may learn to feel of cloth, and to distinguish red from blue by the feeling of the grains of the color pigment. But that is not knowing color,—it is knowing the size and form of these grains.

Now, as color is always seen spread out on a surface, we must concede, apparently, that as we see the color, we must see the surfaces. And it is hard to believe that the eye alone does not give us the idea of distance or length. An English oculist tells of a man that was cured of blindness by the removing of a cataract from his eyes. Everything he saw appeared to touch his eyes. And, therefore, it is argued that sight does not give us distance. But if the objects touched his eyes, or seemed to, they must still have seemed at a distance—though a very short distance. The knowledge of distance, however, does not necessarily imply a knowledge of precise and comparative distance, as so many feet, inches, etc.

Resistance to Muscular Effort. Many writers consider that we learn many things that are usually attributed to touch, by means of resistance to muscular effort. They say that merely touching a heavy piece of iron does not give us a notion of its weight. We get that notion only when we attempt to lift it, and find it resisting the effort of our muscles. The same thing is thought to be true of hardness. We do not get the knowledge that a body is hard by touching it. That knowledge comes as a consequence of an effort of our muscles to press the body together, or crush it. This seems to be reasonable.

Are the Senses to be Believed? Some philosophers have declared that the senses are not to be trusted. The Eleatics and Skeptics among the

Greeks, and many eminent modern writers, have held that view. They admit that things appear thus and so,—that the phenomena appear to the mind,—but they deny that there is anything in the world corresponding to these phenomena.

But all mankind seem to take the truth of this testimony of the senses for granted. When I think I see a tree, I act upon that thought, and avoid running against it. I entertain no doubt, practically, that the thing is just as it seems. I see a rabid dog coming towards me, and lose not a moment in beginning to escape. Even the philosophers who deny the truth of this testimony do the same. They run from danger, they avoid obstructions, that are made known to them only by their senses, as promptly as the veriest ignoramus. And on the whole, it appears more reasonable to believe that the Creator has made our senses to tell us the truth rather than to deceive us.

It is impossible to *prove* that our senses deceive us, because we have no means of doing it but through the senses themselves.

Senses sometimes give us False Information. It is said that our senses sometimes mislead us,—that a straight stick appears bent when partly immersed in water, or a square tower appears round at a distance. This is urged as a reason for not believing the senses. But a moment's thought will show us that the vision is not responsible for these mistakes. This sense does not give us forms and directions absolutely. It only gives us appearances. It gives us the appearance of the stick in the water, just as it is presented by the light that comes from it to the eye. It gives the appearance of the tower just as the light presents it to the eye. Concerning the first, we *infer* that it is crooked; concerning the second, we *infer* that it is round. Our vision in each case is right; our judgment in each case is wrong. We have noticed in the past that sticks presenting the appearance were crooked; we conclude that this too is crooked. And the same with the tower. The same is true of such delusions as mirage.

Organs sometimes diseased. Sometimes the organs of sense are diseased or thrown out of their normal state, and then, of course, we cannot rely upon their testimony. During fever the eye often sees strange sights, and the ear hears strange sounds. But these mistakes may often be corrected, and when by the general testimony of the senses we make the corrections, we rest satisfied with them. And we consider the mistakes as abnormal, and reject them, but this does not invalidate in our minds, the healthy testimony of the senses.

Distinction of Terms. That which the senses give us directly, as when

we feel of a hard body and get a knowledge of hardness, is called their direct testimony. That which we get by inference from the senses, or by the exercise of our judgment upon this direct testimony, we call the indirect testimony of the senses. I feel a polished marble surface, and find it hard ; here is a knowledge of hardness by direct testimony. A skillful painter has so arranged his lights and shades upon a wall that I look at the result of his work, and think I see a solid globe ; if this false inference should be charged upon the sight at all, it must be considered as very indirect testimony from the eye.

RICHARD EDWARDS.

A TALK WITH AN OLDER BOY.

A few days since I was sauntering about the grounds of the Smithsonian Institute in Washington. Sitting upon a bench to rest, under one of the trees, I was joined by an older boy than myself, a Prussian, and an *employe* at the Institute. He was in a talkative mood, and soon began to enlighten me in regard to his past history, his experiences as a teacher, and his opinions about this country, especially respecting politics and education.

Said he, "I came to this country about twenty-five years ago, full of *entoosiasm* for its freedom, intelligence and free institutions. Soon after my arrival, I attended a meeting to ratify the nomination of the democratic candidate for president. When the speaker announced the name of FRANKLIN PIERCE, there was a great outburst of cheers, the *entoosiasm* was unbounded. One man standing near me seemed quite unable to contain himself, so earnest was he in applauding the nomination. But, when the noise had died away a little, this same earnest patriot turned to his neighbor and said, 'Who the — is FRANKLIN PIERCE, anyway?' This began to cool my *entoosiasm* ; I could not understand how one could shout so vociferously for a man he did not know. I understand it better now ; but my *entoosiasm* has been cooling ever since."

He taught for awhile, as private teacher, in the family of one of the LEES, of Virginia. He threw himself into his business with his native "*entoosiasm*." One of his pupils was a lad of about ten years ; and with this boy he was able to accomplish his work with some satisfaction. But an older boy of sixteen, who had been to "college," was put under his charge ; and it was a sore trial to contend with the vicious habits of study that this

boy had brought from college. The tutor finally told the mother of the boys that the little one knew more arithmetic than his older brother did. "Impossible," said she, "he has been to college." "Come with me," said the tutor, "and I will prove it to you." The mother came, and he set each of the boys a problem that he had not seen before. Soon the tutor stepped along, looked over the elder boy's work, and said, "All wrong." The boy was in consternation, begged to be told what was the matter, and how to do the work right. "I tell you nothing," said the tutor, "you should know for yourself that you are right." He now stepped to the little boy, examined his work a moment, and said, "All wrong." But the little fellow, instead of crying out like his brother, was pugnacious, and went on to show that he had done his work exactly according to the rules. Turning to the mother, the tutor said, "There, you see; he know, he fight."

He was not only earnest to teach his boys all he could, but he took great pains to help them in their sports; he hunted with them, and fished with them, and tried in all ways to discharge his duties in all their fullness, and not simply "according to the bond." But, one day when he was urging them to do their work faithfully, and to *master* the subjects of their study, and not simply learn their lessons to recite, they said to him, "What difference does that make to you? You get your pay just the same." "Just as though a few dollars of pay was all!" Said he, "You ungrateful fellows, if that is the way you look at it, I won't be your tutor any longer."

He then went to teach in a "College," himself. But here he found boys studying the paradigms in Latin Grammar, and trying to read Ovid at the same time. The boys complained to the Principal that he asked questions that were not in the book, and questions that were in the lessons of the last week. And the Principal took the part of the boys. This made a rupture between them. Another point of discouragement was that the Principal wanted him to mark the lessons, and give perfect marks when the answers were given just in the language of the book, whether it was understood or not. The quarrel soon waxed so bitter that he said to the Principal, "I won't teach in your College; money wouldn't hire me to teach your way."

And so he quit teaching. "Teaching in this country," said he, "is a thankless task. The teachers are not half paid,—they are not respected,—they must make things appear as they are not,—they must teach just as the text-book says; I wouldn't be hired to teach here. And then, in the Public Schools, they must change their text-books every year; I have paid seven dollars for geographies for my child, and one of them is just as good as another."

The old man's cigar, like his "enthusiasm," had burned out by this time ; and we went our several ways. But as I wound my steps over to the Capitol, I thought it is sometimes a good thing "To see ourselves as others see us," even though their views may be a little more jaundiced than justice demands.

AN OLD BOY.

OPENING EXERCISES.

Enter the school-room with a sunny countenance. Let your first words be uttered in pleasant tones. There may be little noises in the room,—the slamming of a book on the desk, or the dragging of a boot over the floor. Wait silently until all have become quiet, then proceed quietly.

If you have charge of a school which is graded, listen to the roll-call by grades, writing at the same time the numbers of all absentees, on the board. Leave the numbers undisturbed until the close of the session ; from these make up the record accordingly. Everything should be conformed to a previously prepared programme. Next, sing one or two stanzas after the page has been announced by the chorister. Just here let me write my testimony in favor of singing in public schools ; indeed, no school ought to prosper unless singing is enforced in all its grades. It is not very difficult to enlist every child in this exercise. Then ask all to repeat with you, or alternately, some previously assigned scripture lesson, say the Beatitudes, "Blessed are the poor in spirit, etc." These few verses should be learned by all, so that no book shall be needed.

It may be that some unfortunate little boy or girl belonging to the school has been maltreated by his superiors. If such a case comes within your notice, stop short when you have repeated, "Blessed are the merciful, for they shall obtain mercy." Now is the moment of all others for the application, and it may be the grinding in of a valuable lesson, a great humanitarian doctrine which touches bottom in all ranks and conditions of society. Say a few words and to the point. Tell the boys how infinitely contemptible it is to abuse an inferior, be it man or beast. Then sing one stanza bearing upon the thought in the morning lesson. Perhaps the fifteen minutes assigned for this work have by this time been consumed ; if so, close at once.

It would be well to vote the Bible out of our schools altogether if no point is to be gained by the reading of it. In many schools, the few minutes set apart for devotional exercises are periods of supreme delight to the

mischievous makers, and even those pupils who participate in it do so in a careless, listless way. So dull is it indeed in many cases, that both pupils and teachers regard the schoolmaster's *devotion mill* as a humdrum machine, with the water always low in the sluice. A change would come over the spirit of such a school if some definite words were assigned, say the ten commandments, then ask the entire school to learn them. Perhaps ten children may prepare the exercise before the next session. Never mind; call upon them at each succeeding session; soon all, or at least a majority, will have learned it. Do not, however, continue the same lesson until it becomes monotonous, for this is just the criticism made upon the average scripture reading. Introduce a new exercise as often as may be desired. I have in mind a special lesson which was used with good effect in my own school. It was necessary to impress the children with some regard for superiors, and especially did it seem desirable to inspire a due regard for the aged. Having this in view, the following and similar verses were collated from various parts of the scriptures: "Thou shalt rise up before the hoary head and honor the face of the old man." "Honor thy father and thy mother, etc." The whole lesson consisted of seven or eight verses, and after being learned by the entire school, was repeated with a heartiness which never results from the reading of a Hebrew genealogy in I. Chron. Then we sang, "Don't forget the old folks." The good impression made by this lesson will not soon be forgotten, even by the writer. A few words of prayer at an opportune moment may be well, even the reading of the LORD's prayer is sometimes effective, yet the railroad speed at which it is delivered by many teachers, and even preachers, renders the performance exceedingly dubious, to say the least.

"Words without thoughts never to Heaven go." A real prayer is a human thought melted into the sentiment of the heart, and doubtless the most effective petitions were never translated into words. The twenty-third Psalm makes a very good lesson when learned, as does also the first. Many other similar lessons will be suggested to the thoughtful teacher, and if carried out judiciously, they will add a charm to the opening exercise which is exceedingly desirable in many of our country and graded schools.

Just here it occurs to me that no provision has been made for those schools in which the use of the Bible is interdicted. If the SCHOOLMASTER please, I shall be glad to present in a future paper, an alternative for the *Bibleless* schools.

S. W. PAISLEY.

School-room work should never be at random. If the object of devotional exercises is to cultivate devotion, the value of them can be correctly measured by obvious results.

THE COUNTRY SCHOOLS.

This is the teacher's noon-time, and as the successful farmer improves the hour of noon by reading a good farm journal, or by gaining instruction from some reliable source, or by jotting down, for the guidance of others, experiences, the utility of which he has fully tested, so will the truly earnest teacher read his school journal, frequent his library, consult those who have had more experience than he, arrange his plans, and instruct himself in all ways possible for the coming work, not omitting to give any plans of his own which he believes will be useful to his fellow-workers.

The reader is referred to a short article entitled, "The Country School," beginning on page eleven of the January number of the *SCHOOLMASTER*, and is recommended to read it before perusing this farther. And, by way of explanation, let me say, here, that I am talking of no school but the *country* schools, the *district* schools, and that the suggestions I may make apply wholly to the teachers who work in these schools.

I suppose most that is written concerning schools is written by men and women who are not now at work in the country schools; who write looking from their present stand-point, and who, therefore, in making out their "courses of study for country schools," are quite apt, at least, to forget one very essential thing, and that is the very limited time we teachers have to each recitation. Perhaps a comparison, showing to some extent, at least, the similarity and dissimilarity of country and town, graded schools, will not be amiss here. Let us take the average country school and grade it as suggested in the January No. We find we have four general grades, A, B, C, and D, the last being, really, two grades. To A we give four studies; to B, four; to C, four; to the advanced part of D, three, and to the rest of D, two, for the term. Allowing four times for the little folks to read, and one recitation, daily, of each of the other studies throughout the grades, we shall have about twenty recitations daily, averaging sixteen and half minutes. Here we have a graded school in miniature, thrown into one room, and under the charge of one teacher.

Now let us take the average town school of eight grades, with three grades in the primary, under the charge of one teacher, and limited to four studies each. Now count one recitation on the average to each study per day of 330 minutes, and we see that we have 28 minutes to the recitation. Compare time.

Suppose the different grades of this school to be thrown together into one large room with one teacher in charge. It would then be in the condition of the tolerably managed country school, only much larger, of course. From this suppositional view, it is easy to see what would soon be the condition of the school. If this be so clearly seen, it is not difficult to conceive of the utterly chaotic state of that country-school where no approach to order and regularity has ever been made.

Compare the advantages of *plan* with the disadvantage of *no plan*.

A teacher was employed in a country school to work there during the winter term. The school was a large one—seventy enrolled—fifty-eight in daily attendance. It would be difficult to think of a more heterogeneous school. So visionary and uncertain were many even of the oldest scholars in regard to what they wanted to study, that there were many cases where an individual brought as many as seven different kinds of text books, expressing a wish to pursue so many studies at once. So great was the diversity of text-books in the school, that the perplexed teacher at first wished it practical to organize as many classes as there were scholars.

However, after much labor and annoyance, assisted by many of the scholars whom he soon enlisted in the good cause, he succeeded in organizing (?) the school on the basis of *thirty-three* recitations daily. This might seem at first like a discouraging result, but really it was an improvement upon what had been, and by uniting classes, encouraging uniformity of text-books, and showing the utility of union of work on the part of scholars, he succeeded (as the officers had the good sense to keep him there two years) in reducing the number of daily recitations to eighteen, and in pretty fairly testing the utility of grading country schools.

The limited time would suggest the necessity of the greatest promptness in calling and dismissing classes. Teach the scholars the great importance of cheerful, instant obedience, not only for the purpose of making the best use of the time, but, also, for the sake of the habit thus formed.

The first-reader part of the D grade includes all the little folks who are not qualified to use the second reader. Some may be found to be able to read with some degree of readiness, while others may not know their letters. This, however, will make no difference, as their instruction will begin as though none knew their letters.

Take one of the first words found in their books, and, first, ask if any one can tell what to call it. If no one is able to do that, tell them what to call it, and then talk about the word, make several sentences containing it, and have them repeat after you. Now print the word on the board more

than once. They have by this time become familiar with the *word*; next comes the teaching of the *parts* of the word, or the letters. Name as many parts of the *thing* represented by the word, as there are letters in the word. For instance, if the word be *AX*, speak of the *handle* and of the *sharp-part*. Now print on the board again, placing the letters far apart, and teach the names of the parts of the *word*—the letters—until they are as well known to the child as the parts of the *thing* are.

The teacher who has never tried this will be surprised to see how naturally and readily the children will fall in with this method of association. Don't forget to teach the small and the large letters, and teach by association, as there are large axes, requiring large handles, as well as there are small axes, requiring small handles. There are large dogs that have large heads, large feet, and large ears, as well as there are small dogs that have those useful appendages of a corresponding size.

Now comes the slate work. A little skill, on the part of the teacher, is required here, so that the child shall not become discouraged at first. Let him draw a picture of the ax, or of the dog, then the words, then the parts of the words. It will be rude, bunglesome work at first, but do not discourage the little worker by intimating as much. This work may proceed until there is some advancement made, then the attention of the class should be called to the figures numbering the pages; teach their use there, associating them with oral counting. After this, the Roman numerals used in the book should be introduced, their use explained, and taught by association as before.

A constant and interesting review should be kept up, and the exercises varied as the interest of the scholars flags.

J. W. WRIGHT.

(TO BE CONTINUED.)

GEOGRAPHY AND HISTORY.

Geography and Chronology have been called the eyes of history, and certainly it is only through them that we can get any clear notion of the onward march of events. It is of the first of these that I wish to speak, not in any philosophical way, but only to jot down on paper a few points that have been impressed on my mind while teaching history.

It is not very hard to realize that history must mean little to one who ignores geography. A pupil who puts Saguntum in the north-eastern part of Greece, who cannot tell whether Carthage was in Europe, Asia or Africa, and who has not the remotest idea of where Cannæ was, can have but little

knowledge of the Punic wars, even if he can tell the exact number of rings gathered on the last disastrous field. To such a one, facts lose their hold on earth, and float away in space, a dim, undefined cloud. And yet, though this seems to be a fact so self-evident, it is a fact which has not yet reached the consciousness and conviction of *all* teachers. Some there are still who give to their pupils "nothing but leaves," as witness the following, founded on fact.

The superintendent dropped in while the class in history was reciting. James had just begun a new page and was repeating it glibly, word for word. He paused after a sentence or two. "And," said the teacher. "And," said James. And, thus started, his machine rattled away over two or three sentences again; but again his memory failed. "The," said the teacher. "The," said James, and on he went triumphantly to the foot of the page, when the teacher turned to the superintendent with a satisfied air and said, "Don't you think my class is doing well?" Of course he did, how could he help it?

Not only is attention to Geography necessary to *understand* history, but the facts of the latter are retained more easily by giving them their proper location on the earth. I know of no better way to fix the career of Alexander, *dates and all*, than to follow his course on the map from Macedonia to Babylon. Let the Granicus and Issus, Damascus and Tyre, Alexandria and the temple of Jupiter Ammon, Arbela and Hydaspes, Hyphasis and Gedrosia find a lodgment in the pupil's mind as places whose location he *knows*, and the events of that wonderful life are mastered, once for all; but let them be but names floating about in the medley of the brain, and the whole story soon becomes as indistinct as a shadow cast by the evening star.

The *how* is not a difficult problem in schools where wall maps are plenty or an atlas lies on the reference table. They must simply be brought into constant use. Where there are none of these helps, black-board sketches may be made useful for class work. In any case there must be constant attention to the geography, or the term slips away—and the history too. The *where* must accompany the *what* and the *who*.

As a special exercise, I at one time tried with good effect a topical review of the geography involved in a term of history. I wrote out a list of all the places mentioned, put these on slips of paper and distributed to the class requiring them to give location. At other times, I have required the class to study up the topography of some particular battle field. Take, for instance, the battle field of Marathon. In what state of Greece was it? How far from Athens? Which way does the plain slope? Where are the mountains? the river? the swamps? How large is the plain? Where were the two armies drawn up? What were the advantages of the Grecian position?

Methods of doing the work will suggest themselves to every live teacher.

A REMARKABLE SENTENCE.

The Latin sentence, "*Sator arepo tenet opera rotas*," is perhaps the most peculiar to be found in any language. Let the sentence be read from right to left, and the same words in order will appear as when read from left to right. Now let "s," the first letter in "sator," "a," the first letter in "arepo," "t," the first letter in "tenet," "o," the first letter in "opera," and "r," the first letter in "rotas," be united into one word, and the result will be the first word of the sentence, viz: "Sator," will be formed. The remaining words of the sentence can each of them be formed in a similar way, the second letters respectively of the words of the sentence giving the second word; the third letters, respectively, the third word and so on.

The first word of the sentence read backwards gives the last word; the second from the beginning read backwards gives the second from the last, while one word, "tenet," reads backwards or forwards, the same.

The sentence may be *freely* translated thus, "God pervades (or fills) the whole universe, and has entire control of all its movements." Four of the words in this remarkable sentence, viz: "Sator," "tenet," "opera," and "rotas," are classic Latin, and but one, "arepo" is a Latin vulgarism for "adrepit."

The meaning of each word is as follows: "Sator," literally, "planter," "father," "Creator," and hence "God," as the planter, father, or Creator of all things; "arepo" for "adrepit," literally, "creeps into," "insinuates oneself into," and hence "pervades" or "fills;" "tenet," literally, "holds," and hence with the addition of "opera," conveys the idea of holding or having under entire or full control the workmanship of the universe; "opera," literally, "works" or "workmanship;" "rotas" literally, "wheels" and hence "motions" or "movements."

GRANVILLE F. FOSTER.

WHAT ARE JETTIES?

In the last number of this journal, something was said of the value of general exercises in school. Allusion was made to the Mississippi Jetties. We give herewith a brief description of them, taken from the *Scientific American*.

The delta of the Mississippi is formed of narrow strips of land, mostly low lining banks, through which the river winds until it makes its exit to

the Gulf by a number of narrow passes. In some of these channels previous attempts have been made to deepen them by dredging, with but partial success, however, as a single flood has been known to carry down sufficient sediment to fill them to their original depth; and the current, besides, emptying into the open water at the mouths, speedily left at that point bars of blue clay, surmountable only by light-draft ships. The gist of Captain Eads' plan will now be readily apprehended when it is regarded as shifting the point of deposit of these barriers from the shoal water at the entrance of one pass, out into the deep water where filling up by natural causes is impossible. By this means the river current is to be made to cut out and scour its own channel across the present bar. To do this, it is obvious that the banks of the pass must be extended so as to lead the stream far enough out; another section of conduit, as it were, must be added, and this is now to be formed by the sub-marine dykes or jetties.

The material of which these structures are to be composed is willow twigs bound in bundles, termed by engineers, "fascines," eight or ten feet in length, and about as many inches in diameter. A large number of fascines at a time will be lashed together to form rafts, the first of which will be from seventy-five to two thousand feet in width, the largest rafts being sunk in the deepest water. The rafts will next be towed to the proper point, there loaded with stones and submerged, and thus the work will continue, one raft being sunk above another until the surface is reached. Each line of rafts will be narrower than the one below it, until the upper course will not be more than ten feet wide. The two walls which will thus be constructed will be prolongations of the banks, and between them will form a channel with sloping sides. In the course of time the interstices of twigs and stones will fill with sand and mud, so that eventually, two solid submarine levees will be produced. Very little pile work, it is said, will be required except, perhaps, at the head of South Pass, which is the outlet at which the jetties are to be built, in order to provide for the proper regulations of the volume of water in the new channel at various stages of the river.

A collection of 300 species of our native lepidoptera, each represented by from one to twenty specimens, *correctly named* and nicely mounted in a first-class cabinet, may be had at a very low rate through the editors of the *SCHOOLMASTER*. This offer affords an unusual opportunity to some high school or college to make a valuable addition to its collections.

SHORT SERMONS FROM FAMILIAR TEXTS.—II.

They have a zeal of God, but not according to knowledge. Rom. x. 2.

Nothing is more fatal to the success of a school than for the teacher to become a hobbyist. It is the purpose of a school to bring out in rounded proportions all the capacities of all its members. The rider of hobbies develops them as a pumpkin is developed that grows in the crack of a fence,—big, perhaps, but without symmetry. It is well that in a college we should have men who devote themselves to specialties, for, though they all prompt growth in special directions, the resultant of these growths is symmetry. But for the public-school teacher to be a specialist is for him to be a failure. I have not a doubt that those who are so enthusiastic in teaching figures, having the pupils cipher through all the arithmetics, high and higher, that they can find, are perfectly honest in the thought that they are doing just the thing that should be done. They have a zeal, an earnest, honest one, a zeal of God, but is it according to knowledge? Hearing from what they think to be good authority that language is the main thing that should be brought out in the pupil, arithmetic is laid on the shelf, and the grammars and compositions are brought into requisition, and another mistake is made. From this, they swing to natural history, and pupils and teachers are busy hunting bugs and snakes, and all else goes for naught.

If the teacher is showman enough to ride all the common branches at once, and drive the sciences abreast ahead of him, he can be a rider of hobbies with safety to himself and profit to his pupils.

The finest compliment I ever heard paid a teacher, was: "When I heard your work in astronomy, I thought that was your hobby; when you conducted a class in reading, I made up my mind that I had been mistaken; when I listened to your class-work in natural philosophy, I determined that was your forte; but, when, at the last hour, you led your class in the discussion of quadratics, I gave it up."

Teachers, when we can merit the above compliment, we shall surely have within us a zeal that is of God, and that is also in accordance with the highest wisdom.

C.

OFFICIAL.

The Supreme Court has rendered a decision of importance to teachers, and we herewith present an abstract of the same, condensed from the full opinion given in *The Western Jurist*, for September. Those desiring the full opinion can secure it by sending fifty cents to the *Western Jurist*, Bloomington, Illinois.

The appellee was a pupil in one of the common-schools of Winnebago county. The directors had prescribed a course of study which included book-keeping, and it was the regular study of the class to which appellee belonged. She declined to pursue the study and was, in consequence, forcibly expelled from the school by the principal, who was acting under the orders of the directors. She instituted an action of trespass against the directors, and the jury found a verdict in her favor, and assessed the damages at one hundred and thirty dollars. They appealed and the Supreme Court affirmed the judgment.

The following points are made in the opinion :

Schools—Power of teachers and directors to prescribe studies—Rights of parents—A statute, which enumerates the branches that teachers shall be qualified to teach, gives all children in the State the right to be instructed in all those branches. But teachers nor directors have power to compel pupils to study other branches, nor to expel a pupil for refusing to study them. As to whether pupils can be compelled to study the enumerated branches, the court expresses no opinion.

Same—The higher branches in common-schools.—The license given by statute to teach *other and higher branches* does not authorize the maintenance of high-schools, nor the teaching of academic courses. There is a limit to the power to have other and higher branches taught in the common-schools.

Power of Directors.—School directors may, to a reasonable extent, require a teacher to give instruction in the higher branches, but it is optional with parents whether their children shall study them.

Trespass—Joint and several liability of teacher and directors.—The unlawful expulsion of a pupil from school is a trespass for which the teacher and directors are personally liable. Nor can a teacher justify such unlawful act under the authority of the directors.

Causes of expulsion.—School directors can expel pupils only for disobedient, refractory, or incorrigibly bad conduct, after all other reasonable means have failed. Expulsion is not designed as a means of punishment.

STATE EXAMINATION. 1876.

SCHOOL LAW.

(Time, 40 Minutes.)

1. Explain the division of the school funds, by the County Superintendent, to townships, giving the basis of the distribution and the source of the funds distributed.

2. Make diagram of a monthly schedule. Why is it necessary they should be kept?

3. State the conditions necessary for the transfer of pupils from one district to another.

4. What are the qualifications required by law for a first-grade certificate?

5. What are the qualifications for a voter at a school election?

6. With whom does the township treasurer file his bond? the county superintendent? the state superintendent?

7. What is the duty of the county superintendent, in case the trustees fail to furnish the statistics and information required by law?

8. What are the four sources from which the money for current expenses of schools is derived?

9. State the only way in which the special taxes levied by order of the directors, and all other school funds in the hands of the town treasurer, can be paid out?

10. What powers and duties, in addition to those of school directors, are conferred upon Boards of Education, under Section 80 of the School Law?

ARITHMETIC.

(Time, 90 Minutes.)

(Put all your work on paper, so that it will explain itself. Results, without the processes, are of little value.)

1. Express forty-four thousand three hundred and one, in three different ways.

2. Write the table of linear measure in the metric system.

3. Give the two algebraic formulas from which the arithmetical rules for extracting the square and cube roots are derived.

4. I have a 7 per cent. note for \$360, dated March 12th, 1874, due February 12th, 1877, on which is endorsed \$50, June 15th, 1875; December 11th, 1876, I get it discounted at 10 per cent.; what are the avails?

5. Give your method for deducing the rule for dividing one common fraction by another, and also for dividing one decimal fraction by another.

6. A person received an invoice of watches from Geneva, where they cost 22,800 francs, gold; duty 25 per cent.; cost of transport, 35 francs; commission to agent, in Geneva, $2\frac{1}{2}$ per cent.; what did they cost in greenbacks, gold being $12\frac{1}{2}$ per cent. premium?

7. If 5-28 be reduced to a decimal how many digits will appear before the repetend, and why? and how many in the repetend, and why?

8. What is the quotient of .0001 divided by .00000001?

9. In 4,629 bushels of wheat, by weight, how many myriagrams, supposing there are 15.43 grains in a gram.

10. The light that left Sirius 21 years ago you will see to-night. Assuming the velocity of light to be 95,000,000 of miles in 16 minutes and 8 seconds of time, what is the distance of Sirius from the earth?

GEOGRAPHY.

(Time, 60 Minutes.)

1. Make a sketch of Illinois, showing its chief rivers and cities.

2. Name the states bounded in part by the Mississippi river, and give the principal cities situated on its banks.

3. What are Isothermal lines? Why do they vary from the parallels of latitude?

4. How much longer is the Equator than any meridian circle? Give the reason for it.

5. Give the location and height of Mt. Blanc, Chimborazo, Mt. Washington, Fremont's Peak, Mt. Lebanon and Ben Nevis.

6. Name all the States that send no waters to the Mississippi river.

7. Trace a water route from Chicago to Yeddo.

8. Trace the 42° N. Latitude around the world, naming the countries which it traverses, and the cities near which it passes.

9. Prove the rotundity of the earth, also that it is an oblate spheroid.

10. If St. Louis is 13° west from Washington, and both on the 39° parallel N., how many miles from one to the other?

U. S. HISTORY.

(Time, 60 Minutes.)

1. What was the form of government in South Carolina in 1750?

2. Under the Articles of Confederation, where was the Executive power vested?

3. State the main points of difference between the Articles of Confederation and the Constitution.

4. Give a synopsis of the campaign which closed with the surrender of Cornwallis at Yorktown.
 5. When was the present Constitution adopted, and why?
 6. Give the causes that were, at the time, assigned for the war of 1812.
 7. When did the war of 1812 terminate? What were some of the conditions of the treaty of peace made at its close?
 8. Give causes for, and the result of the war with Mexico.
 9. What proportion of the United States was embraced in the Louisiana purchase? Of whom was it bought, and how much money was paid for it?
 10. Make a map of the Mississippi river from Cairo to the Gulf of Mexico, showing the principal cities on its banks and its tributaries; and give an outline of the military operations that resulted in opening it to the Federals during the recent war of the Rebellion.
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EDITORS' DEPARTMENT.

The HANFORD murder is the prevailing theme with the teachers of the State. Among the acquaintances of the unfortunate victim, the feeling is of the intensest character. A fellow teacher, a man of pure life, of refined tastes, of unquestioned skill, of patient industry, has been smitten down in the retirement of his home, and in the presence of his wife and children, by the hand of a brutal assassin.

And why?

Mr. HANFORD had dared to express his belief that certain members of the Board of Education had used their places to promote private interests, and that a woman had lent her ability to influence appointments to positions of importance.

There was no hint that she had been guilty of unchaste conduct, or that she was aught but virtuous. It was, and had been, currently reported that she was fond of power,—that she was the author of numerous articles which had attacked, in any but moderate terms, men and institutions. She was considered hostile to the present administration in Chicago, and was thought an enemy to be feared. This, Mr. HANFORD stated. Mrs. SULLIVAN seems to have thought that she could enter the arena with men, assail them as she pleased and when they returned her blows that she could retire with perfect security behind the fact of her womanhood. Had the same article referred to Mr. SULLIVAN instead, in precisely the same terms that it did

to her, he would have considered it no more than what was to be expected, and the thought of demanding satisfaction would not have occurred to him.

Mrs. SULLIVAN, like many of her sisters, seems to think that she may give blows with impunity, but if the assaulted individual returns the attack in her own method, she is an injured woman whose vindication requires the punishment of her ungallant antagonist.

At this distance from the scene it seems strange that the woman should be at large. She is a confessed accomplice, and circumstances would seem to indicate that she was the instigator of the attempt to make Mr. HANFORD retract his statements.

There is but one name for the dreadful deed. It is murder in all its hideousness. In the presence of such a horror, society seems a sham, and personal security a myth. A great wrong is done; if scenes like this are to be enacted in the sacred asylum of home, where may one turn for protection from the ruffians whom he dares to criticise? Swift and certain punishment should follow the cowardly deed. All considerations of justice demand it.

To the friends of Mr. HANFORD, we tender the poor sympathy that our feeble words can express. Words are idle things in the presence of so appalling a calamity, yet they show somewhat the promptings of the heart. He acted where he conceived duty to lead, and died the first martyr to the cause of popular education in Chicago.

The delay in the appearance of the present number is due to the absence from home. The Centennial, like charity, may cover a multitude of sins or omissions. We shall, probably, not be so late again until the next Centennial.

On every side we hear the busy note of preparation, and by the time this number reaches our readers, many will have put on the harness and will be busy at the never ending tasks.

Do not forget the SCHOOLMASTER! A word to a friend here and there will cost nothing and will help the Journal. Principals can be of great aid to us by raising clubs among their assistants, while county superintendents have it in their power to double the circulation of the Journal before January first. We should at have least six thousand subscribers in this State alone. Many directors will avail themselves of the Journal if their attention is called to it. We have had enthusiastic aid from many whom we could name, and we are grateful therefor, but we ask others to go and do likewise.

We begin, with this number, the publication of the topics used at the last State Examinations.

The test seems to us the most difficult one yet imposed, and we await the result with much curiosity.

It is futile to talk of aiming at anything like uniformity of qualifications among teachers until there shall be some agreement as to what the common schools should do. There is a general impression that pupils should be instructed in the ordinary branches of an English education, but how far this instruction should be carried, or the amount of it that should be accomplished in a specified time are points that are settled with no degree of definiteness. Absolute uniformity is neither possible nor desirable, but it is believed that much good would result to the common schools of the State if a concerted movement could be made toward putting all the schools upon the highest plane occupied by any.

The prime requisite for this movement, as well as for any other advance in the schools, is *intelligent supervision*.

Illinois has retrograded in educational matters during the last four years. The introduction of the "new studies" was poor compensation for the injury inflicted upon county supervision. The addition of work for subordinates should have been attended by an increase in supervisory facilities. What evil genius suggested the illogical policy of increasing the former and diminishing the latter?

The county superintendency is the center of the situation. It is also the most vulnerable point of the system. So long as politicians control the nominations for the office, so long it will be at best but a partial success.

The meeting of the Legislature is near at hand. Some means should be devised by which this right arm of the service can be put upon a war footing. We believe that the matter is in the hands of the teachers. A wise, concerted movement will restore it to new life, and remove the objectionable features of the present system. The need is apparent—a wide-awake, professional superintendent in every county, or, where counties are very small, in combinations of counties. How shall it be accomplished? Now is the time to agitate the subject. THE SCHOOLMASTER should be "full of it" until the adjournment of the Legislature.

2. As a second means of securing some unity of action, it is our belief that the State Superintendent should at once call together the most thoughtful and active county superintendents, and that they should prepare a course of study for the district schools of the State. This could be made

sufficiently general to suit the varied wants of different sections, and yet sufficiently definite to introduce methodical work into every school house. Order would take the place of anarchy. The tendency in every instance would be for the better. Instead of hap-hazard work which has neither beginning nor end, which looks toward nothing and connects with nothing, there may be a systematic course which the pupils can begin and finish, and then be ready for something higher. With such a course of study promulgated by the State Department and enforced by the separate superintendents, there would come radical reform in many localities.

3. As a third step looking toward uniformity in qualifications, we believe that the County Superintendents' Association should appoint a committee from its members to prepare a series of questions which shall present the minimum of difficulty. These should be furnished to each superintendent, not necessarily to be used by him in his examinations, but to determine the grade of qualifications that he should demand. This agreed upon, the examiners should have sufficient back-bone to hold up to the requirements.

4. Institutes might then become a power tenfold as great as now. The idea of holding them for the purpose of fitting teachers for the examinations is a bad policy, and one, that in some localities, is working much more evil than good. Hold the examinations at the *beginning* of the Institute, then take the successful candidates and put them at work upon *courses of study for the schools in which they are to teach*.

Much has been said of the "how?," and "why?," but of more importance is the "what?," which will often suggest the "how?." Indeed, the question "How shall I teach beginners to read?" is answered when one is told exactly what part of the work to present first, what next, and so following.

The current question that one is expected to answer upon all occasions this hundredth year of our national existence is "Have you been to the Centennial?"

Since all patriotic citizens are expected to visit Uncle Sam's birthday party, we mounted our foaming valise and soon found ourselves in the city of brotherly love. After a seven-days' sojourn, one is expected to have, at least, some impression of the success or failure of the great Exposition.

The unanimous verdict is doubtless correct. As an Exhibition it is an unqualified success. So far as we were able to learn, intelligent foreigners unite with the most enthusiastic Yankees in its praise. All previous world's fairs were inferior in the magnitude and variety of their exhibits.

The view from the summit of the towers of the great Main Building is indeed inspiring. At the north rises the majestic outline of Memorial Hall, while just beyond may be seen glimpses of the spacious Annex. The Agricultural and Horticultural Halls meet the view farther to the north-west, while from your feet stretches the vast Main Building covering its lines in far perspective to the east, and buttressed on the west by the scarcely inferior edifice, the Machinery Hall. State buildings, Annexes, Government buildings, restaurants, Foreign buildings, and scores of others, fill up the vast area between, and impress one with the thought that he is indeed a looker-on at the jubilee of a world.

Within the buildings the scene is little less than bewildering. From the educational gallery of the Main Building the scene passes the creations of magic or of fairy land. Nine-hundred feet to the right and left, and four-hundred and thirty to the front, stretches the great Hall crowded with booth and bazar, with tower and minaret, with dome and spire. Over the wonderful scene swing the banners of a score of nations. A walk down the aisles, each a third of a mile in length, reveals the products of a world gathered in strange proximity under the same roof. The laborers at the Cape of Good Hope will find the products of their industry near neighbors to the fruits of Swedish and Norwegian enterprise, while the Egyptians and Chinese may shake hands with the Occident, and mop their oriental visages with linen woven in the valleys of New England.

What we have said of the Main Building is true to a less extent of all the others. To attempt a description is to belittle the conceptions that most have formed of this matchless exhibition of the fruits of human genius and human industry. The brotherhood of man seems a verity, and we are all for the nonce cosmopolitans.

But our readers are interested more particularly in the Educational Department, and we shall attempt to convey some idea of its magnitude and value.

We venture to say that no schoolmaster has left Philadelphia without feelings of disappointment that so grand an opportunity should have been permitted to pass unimproved. The educational exhibit gives, to the native nor foreign visitors, no adequate idea of the American common school system nor of its workings. One may wander for days about the floor of the Main Building and see little that suggests the idea of a great system of schools free to all the children of the United States. Should he seek the modest gallery over the south entrance, he will find a limited space occupied by the educational exhibit of a few States. At the north end of the gallery, two

rooms, each about twenty-five feet square, are occupied by Illinois. One of these rooms contains the Illinois Industrial Exhibit,—the best showing made by any single institution. In the other room are several hundred volumes of class work, and several of maps and photographs. Upon the walls are suspended drawings, showing floor-plans, elevations and pictures of school buildings, with maps, charts, etc.

Other States have their work arranged in a more expensive and captivating manner, but no other has a better showing of good honest work done by the graded, and country schools.

There is an absence of every thing which hints to the observer that an especial preparation has been made or that the work is anything different from what can be reproduced at any time. In several other exhibits only ten per cent. of the papers are shown, or the pupils have been permitted to copy their work at the close of the examination, or the answers are uniform in language; but here all papers are shown, and the impression upon the inquisitive observer is, that everything has been done in strict accordance with the spirit and letter of the instructions.

The foreign commissioners speak in the highest terms of the results and have their clerks busy among the volumes, transcribing their contents.

In our next we shall speak more fully upon this topic, and shall mention more in detail the various points and characteristics of the exhibit.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

The whole country has been startled and shocked by what is known as the HANFORD-SULLIVAN tragedy. Its terrible story is briefly told.

The term of office of five members of the Board of Education expired on the 1st of July last. Mayor COLVIN, on that day, sent to the Council the names of the five members whose terms had expired, and who were appointed originally by his predecessor, ex-Mayor MEDILL, of the *Tribune*, for reappointment. The Mayor's communication on the subject was referred to the committee on Schools, of the Council.

Mr. HANFORD called on certain members of that committee, and represented that the interests of the schools would be subserved by the appointment of new men by the new Mayor, (HEATH). By request of one member of the committee (ALD. VAN OSDEL), Mr. HANFORD reduced the substance of his representations to writing, and gave the same to Mr. VAN OSDEL. When the time came for the Committee to report back to the Council, their recommendation was that the appointments be not confirmed. There was some clamor in the Council as to the reasons for the recommendation of the Committee. Mr. VAN OSDEL, with a supreme disregard for the fitness of things, caused the memoranda, which were not prepared or intended for such a purpose, and which were in the nature of a confidential communication, to be read.

Mr. HANFORD represented that the power behind the throne in the Board of Education, was Mrs. M. F. BUCHANAN-SULLIVAN, a lady who has from time to time been connected in an editorial capacity, with nearly all the newspapers in the city. Mr. HANFORD asserted that Mrs. SULLIVAN had extraordinary influence over the late Mayor COLVIN, and received from him unusual favors. Mr. SULLIVAN complained of, and objected to these assertions, and passed from the Council meeting the Monday P. M., August 7th, to his home, which was near Mr. HANFORD's, and soon after went, accompanied by his wife and brother, to the residence of the latter to seek an explanation or retraction of the statements made in reference to Mrs. SULLIVAN.

Mr. HANFORD, whom the Sullivans had never met before, was found on the walk in front of his house. A dispute which followed the introduction soon grew into a personal altercation, which was terminated by a pistol shot, which mortally wounded HANFORD. SULLIVAN went to the jail, and Mrs. HANFORD was left the widowed mother of three orphan boys!

It is hard to picture the consternation and grief which the terrible affair caused in this community. All the parties are well-known public characters, and have been heretofore almost universally esteemed. While the newspapers have generally treated the occurrence with unusual moderation, none of them have been able to discover a pretext in justification of the deed. It is a sad commentary on human nature that a moment's madness should make a gifted man like SULLIVAN forget his reputation, religion and civilization, and place himself in such awful relations with his conscience, God, and the laws of his country!

It becomes our pleasant privilege to chronicle the entry of two well and widely known teachers, into the "bonds of matrimony." Miss ELLA BRAINARD, of the Normal Class of '67, and afterwards a favorite and highly successful teacher in the FOSTER, and then in the SKINNER School, before a large circle of admiring friends, became Mrs. W. W. VAN ARSDALE. At the residence of her parents in the beautiful town of Somers, Kenosha County, Wis., Miss MARY E. SPENCER, for some years head assistant of the BROWN School, became Mrs. BOOTH, and gave a final consent to emigrate under that name to the distant shores of the Connecticut river in the Nutmeg state. Miss SPENCER—we beg pardon—Mrs. BOOTH taught long in the NEWBERRY, CARPENTER, and BROWN Schools, and with an ever increasing reputation. The many friends of both ladies unite in extending to them hearty congratulations and earnest wishes for many long years of happiness.

Supposing the matter of salaries to have been definitely settled we gave the report of the committee, on that subject, as adopted by the Board of Education on June 20th. Since then, however, a further reduction has been made in accordance with the wish of the city council. The Board of Education seem to have had some discussion as to whether the manifestation of that wish was a "request" or a "command," but finally agreed that it was an "order." The Council wished the salary list of the Board to be seventy-five per cent. of what it was last year. This was substantially agreed to by the Board. A motion to "stand by" the action of the Board, on June 20th, received one vote. The Council also decreed the abolition of Music and Drawing so far as they appear in the salary list. The study of German, like "all that's precious," "hangs trembling in the balance."

In a recent number of the SCHOOLMASTER, occasion was taken, in this department, to urge that educational questions be discussed on their merits. This is a good time to repeat that injunction. There has been much discussion, earnest and vital, during the current month, and we think this matter has not always been remembered. We have sought in our conduct of this department to speak on current topics with no uncertain voice. Our readers will bear testimony that we have not been ambiguous in reference to the recent school regulation, of the Chicago Board of Education. We feel entitled to say, there-

fore, that in some of the recent discussions, either in consequence of ungrounded, though honest, fear, or to meet the supposed exigencies of a vicious diplomacy, false issues have been introduced which have a mischievous effect on the public mind, and tend to prevent future harmony.

We do not believe that any important act of the Board of Education for or during the last two years was done at the dictation of any man or any woman outside that Board.

We do not believe that there has been any ring, or any bribery, or any corruption in the Board during that time.

We do not believe that there has been any undue, or any, exertion of any distinctively Roman Catholic influence in favor of any appointment, or any legislation, or any policy of the Board during that time. We say this with all the earnestness of a conviction begotten of an honest judgment and of personal knowledge.

We do not believe that Mr. DORTY, the Assistant Superintendent, is either a corrupt or an incompetent man.

We are strongly of the opinion that the introduction and defense of these propositions, by the friends of the schools, in the recent discussions, were unwise, because tending to obscure the real points at issue, because they cannot be sustained upon ultimate investigation, and because they tend to inspire groundless alarms and prejudices which may be used by the ignorant or malicious to the great injury of the innocent, and to the final injury of public education.

But, it will be asked, how account for the apparent antagonism between the Board and the teachers? We think Ex-Mayor COLVIN answered the question, unconsciously, perhaps, but nevertheless completely, when he told a reporter, the other day, that when he entered upon his term of office, after consultation with JOHN WENTWORTH, he came to the conclusion that there was "too much PICKARD in the schools." As he naturally appointed men in sympathy with him, there came to be found in the Board, from this inspiration, a feeling unfriendly to the existing organization of the schools, and one by one changes were made with a view to eliminating the Mayor's difficulty. But the teachers had not found "too much PICKARD in the schools." The Superintendent was found to be wise and helpful. He was universally known among them to be a safe adviser and a source of inspiration in every honest difficulty. He was a man of peace. His disposition to be all things to all men, for the sake of harmony, was so great as to almost incur the charge of vacillation and weakness, and yet it was known that on all necessary occasions the teacher would be sustained or promptly condemned. His influence was felt everywhere, and yet there was no ostentation or despotism. His counsels created the spirit of the teacher and reached methods of instruction, as well as accomplished a most salutary discipline. There certainly was a good deal of "PICKARD in the schools" and the consciousness of its value induced teachers to resent its elimination.

This is our theory of the origin and cause of all school difficulties during the COLVIN administration. If the recent discussions had been confined to the actual merits and facts of the case, they would have been shorter, and would have left the public mind in a much healthier condition than it now is.

The Chicago pedagogues have done considerable in the way of book-making. Mr. HOWLAND, of the High School, long ago wrote a grammar, which was published by the SHERWOODS. Messrs. BLACKMAN and WHITTEMORE wrote one or more series of books on music. Mr. PEABODY, of the High School, has written the Practical Arithmetic, in FELTER's series published by the SCRIBNERS, of New York, and the very valuable text-book on Astronomy in RAY's series, published by WILSON & HINKLE, of Cincinnati.

The name of C. G. STOWELL, of the NEWBERRY School, is found on the title-page of BRYANT & STRATTON's Commercial Arithmetic. Messrs. KIRK, of the JONES' School, and BELFIELD, of the DORE, have been associated in the production of the Model Arithmetic, and other books on the same subject, recently published by GEO. SHERWOOD & Co., of Chicago. The newest candidate for fame as an author is Dr. SAMUEL WILLARD, of the High School. During several years'

work in teaching History there has grown on his hands a sufficient amount of matter used in oral discussions, elucidating and supplementing the text, to form a book. This is to be brought out during the coming fall by the APPLETONS, of New York. The period embraced in the work is understood to be from about A. D. 800 to A. D. 1876. It will be entitled A SYNOPSIS OF HISTORY. From Dr. WILLARD's reputation it will be entirely safe to assume that his book will be reliable as to facts, philosophic as to methods, and *humane* as to requirements of pupils.

Alderman McCREA, who is, we believe, the Chairman of the Finance Committee, of the Council, is reported to have said, when reproved for eliminating Music and Drawing from the schools and permitting the study of German to remain, that he "didn't know" that the latter cost more than three times as much as the other two studies. O, for public men who would make it a point to "know" before they legislate.

The swift revolution of the seasons has brought the approach of school days. The hopes, the plans and the enjoyments of another vacation have been added to the accumulating—and dissolving—memories of the past.

The teachers of Chicago have been widely distributed during the last two months. Some have gone to Iowa, Minnesota, Wisconsin, Michigan, Indiana, and to cities of Illinois roundabout Chicago. Others have made the voyage of the great lakes—have witnessed the geologic wonders of the borders of Superior—have picked raspberries and blackberries on the islands of Lakes Michigan and Huron, and have drawn strength and inspiration from a voyage on the majestic St. Lawrence. Many have returned to their New England homes to revisit the scenes of their childhood, and very many have visited the great Centennial Exposition at Philadelphia. Back to the thousand sources whence cosmopolitan Chicago draws its supplies do July and August send her teachers, and they are now returning—each full of things seen, and ready with moist eye and trembling voice to acknowledge the havoc which time is making with old landmarks, old scenes, old friends!

And now the armor is girded on for another year. The time for complaining and grumbling is nearly over. Putting aside things and thoughts of the past, those that are left of the teachers of Chicago will push loyally on to the accomplishment of all that a sorry statesmanship will permit to the best professional ability, energy and physical endurance.

Some very free criticisms have been made upon Superintendent PICKARD's administration of the Relief Fund, within the last eventful month. It will be remembered that at the time of the Great Fire, in 1871, many contributions were made by teachers and others throughout the country, for the relief of teachers and pupils in the Chicago Public Schools. These funds were generally sent directly to Mr. PICKARD, although, in some instances, they were sent to the Board of Education. That body adopted a motion or resolution within a week after the occurrence of the Great Fire, authorizing the Superintendent to distribute all funds received for relief purposes.

Early in the spring following the fire the Superintendent made a report to the Board, showing the amount received, and general method of distributing, and the balance on hand at that time. In this report the Superintendent charged himself with all moneys received, stated the sources whence they were obtained, and gave the general heads under which they were distributed. The report was published as a matter of interest to Chicagoans, and as a matter of satisfaction to the donors. This report showed that there had been received \$22,678.18, and that up to that time there had been distributed \$16,658.59, leaving a balance on hand of \$6,019.59. Of this balance there was reported as "subject to call" \$4,399.42, and in the hands of the Superintendent \$1,620.17. Since the date of this report further disbursements in excess of the contributions were made so that the amount of money on hand on the 18th of July, 1876, was \$3,581.58.

At this latter date a statement was made in reference to the manner in which this balance was kept. It appears that it is principally loaned to parties whose notes, bearing interest, are held by the Superintendent. In point of fact, of the balance now on hand, \$581.25 have been received as interest in this way. The occasion for criticism seems to be that some of the securities are not as safe as, perhaps, a lawyer would insist on having them in doing professional business for a client. The Superintendent, however, holds himself personally responsible for every cent that came into his possession.

Of the money reported to be "subject to call" in 1872, the Superintendent claims to have never been in possession. The contribution of the city of New York, amounting to nearly \$11,000, was sent to the President of the Board of Education, E. F. RUNYAN, Esq., and Mr. PICKARD was notified by the New York Superintendent to draw on RUNYAN, as the money was needed. At the date of the report in 1872, there was thus "subject to call" in the hands of RUNYAN, as above stated, \$4,399.42. This sum has been since reduced by further drafts to \$1,249.42, for which the Superintendent, a few days ago, took Mr. RUNYAN's note. Mr. RUNYAN, though heretofore considered wealthy, has become greatly embarrassed during the past year and is now passing through bankruptcy. There will, therefore, be probably some loss to the relief fund before the RUNYAN matter is settled.

There does not seem to be any complaint as to the distribution of the fund. As a matter of fact Mr. PICKARD's management of the details of that distribution was a marvel of executive ability. Thousands of pupils and teachers throughout the city will bear grateful testimony to the excellent judgment, the wonderful promptness, and the perfect impartiality of that distribution. The record will also show that it was made with unprecedented economy, the expenses for distribution of nearly \$20,000 being less than \$120. It would seem, therefore, as if the Superintendent had done his whole duty. Even if it be admitted that the Superintendent's investments, as reported, are unwise and unsafe the whole matter may be reduced to this dilemma: If these contributions were sent by the donors to be managed and distributed according to the discretion of the Superintendent, any interference by outside parties is an impertinence. If they were to be managed and distributed by the Board, that organization ought not to censure the Superintendent for its own negligence.

EDUCATIONAL INTELLIGENCE.

Woodford County.—At the close of the Institute the following resolutions were adopted:

WHEREAS, Our Institute is drawing to a close, and we, the teachers of Woodford county, believing the teacher's position second to none in importance and responsibility, and that all true aids and incentives should be both recognized and used in the preparation and prosecution of our work, and that sociability and interchange of thought are to be considered elements of success, do acknowledge the means presented by this Institute as conducive in all respects to these ends. Therefore,

Resolved, 1. That we extend our sincere and hearty thanks to our Superintendent and leader, Prof. J. E. LAMB, for his earnest work in behalf of the Institute, his endeavors to establish a thorough system of education, and his interest in the welfare and success of the teachers; also, to his assistants, Profs. E. L. SMITH and W. A. EVANS, for their thorough instruction and efficient aid in conducting the affairs of the Institute; also, to Miss CARRIE RICH for services as organizer.

2. That to Mr. N. PORTMAN, our hearty thanks be given for his kindness and hospitality in furnishing his pleasant dwelling for the social use and enjoyment of the Institute.

3. That we feel under lasting obligations to the good people of Metamora for their liberal entertainment, attention and kindness shown the teachers.

4. That we are greatly indebted to the Board of Directors for their hearty co-operation in furnishing so desirable a place for our Institute work.

5. That the valuable and instructive lecture by Dr. J. S. WHITMIRE, entitled "Life, Organization, and Mind," merits our thanks.

6. That a copy of these resolutions be presented to *The Woodford Sentinel*, *The El Paso Journal*, *The Eureka Journal* and *The Illinois Schoolmaster* for publication.

EMMA C. WAITE,	} Committee.
ADA C. DAVISON,	
JOEL R. MORSE,	
LOVELL B. PICKERELL,	
M. M. YOUNG.	

Whiteside County.—The summer Institute was held at Sterling, and had an attendance of about one hundred and fifty. The Superintendent, O. M. CRARY, was, of course, in charge, and pushed matters with his customary vigor. "Brother Jonathan" was present a few days and gave material assistance in the way of organization, direction, etc.,—matters in which he has few if any superiors.

The instruction was given by the more prominent teachers of the county. H. B. SCOTT taught the classes in Zoology; B. F. HENDRICKS, in Philosophy; GEO. W. MANCHA, in Botany; A. W. BASTION, in Physiology; EDWARD SCOTT, in Chemistry; S. L. CRONCE, in Arithmetic; M. H. WOOD, in Civil Government and History, and the Superintendent, in Grammar and Geometry.

Mr. CRARY has impressed upon all, apparently, the tireless energy that characterizes himself, consequently the Institute was "buzzing" while we were there.

Edgar County.—The County Institute, conducted by A. HARVEY, of Paris, and C. W. JACOBS, of Kansas, is well attended. Fifty-five teachers are enrolled. Two other Institutes are in session in the county, with an aggregate attendance of twenty-five.

Miss S. WATSON, for five years a teacher in the Paris High School, and the last three years principal, has declined to accept the reduced salary offered her by the School Board. Miss WATSON has established an enviable reputation as a teacher, and the excellent condition of the High School is, in a great measure, due to her professional ability, energy and painstaking zeal. It is doubtful whether the vacancy can be supplied acceptably while the retrenchment fever lasts. Some more liberal minded community will profit by the folly of Paris.

Peoria County.—EDITOR SCHOOLMASTER—DEAR SIR: At the close of the Teachers' Drill Institute, which was held during the month of July, the following resolutions were passed:

Resolved, That we recognize in our County Drill Institute an important auxiliary in our work as teachers, as well as a very efficient means for the promotion of the educational interests of the county, and that we will co-operate with every honorable effort to build it up and make it still more practically useful.

Resolved, That we warmly thank the instructors, who so greatly contributed to the interest and success of this meeting, and indulge the hope that we may often in the future have them with us on similar occasions.

Resolved, That we extend our special thanks to the City Board of Education for so generously granting to us the use of the Normal School Building, and to the County Board of Education for the use of the Normal School Library and Cabinet, thus affording us privileges and advantages which we duly appreciate.

Resolved, That we regard the ILLINOIS SCHOOLMASTER as an educational periodical in every way worthy of our encouragement and support, and that we heartily commend it to the patronage of every teacher and School Board in the country.

Resolved, That the large number of teachers in attendance indicated a desire on their part to meet the growing demand of the people for better work, and an ap-

preciation of the fundamental truth in the education of the young, that it is better for them to drink from running streams than from a stagnant pool.

Resolved, That our worthy County Superintendent, Miss WHITESIDE, by her ability, activity and zeal in the cause of common school education, and by her energetic and successful efforts in behalf of this meeting, deserves and we hereby tender her our warmest thanks and best wishes, and pledge her our cordial support in the discharge of all her duties.

D. L. WERTZ, HUGH JONES, SETH SCOTT, R. W. COWELL, ELMIRA JONES, ELLEN M. PATTERSON, JESSIE PURPLE, SUSIE M. BRUSIE.	}	Committee.
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Henderson and Knox Counties.—The Union Drill, at Aledo, under the management of Misses FRAZIER and WEST assisted by Profs. WILSE, of Aledo Academy, and Cox, of Knox Academy, was exceedingly pleasant and profitable. 125 teacher-students were in attendance, and all worked with a will. About one-quarter took up the sciences, the rest devoting their entire time to the "common branches." All took the course of writing lessons, and all joined in the reading exercises, conducted by Prof. COX and Miss FRAZIER. Lectures were delivered by Pres. BATEMAN and Miss WEST, and select readings given by Rev. M. NOURSE, Prof. COX and Miss FRAZIER.

Massac County.—The ninth annual session of the Massac County Teachers' Institute will be held at Metropolis, Sept. 14-16. W. C. SMITH, principal of our schools, Prof. HIRAM FORCE, the County Superintendent, and other assistants, will conduct the work. By the aid of our Institute, our public Examinations, our Southern Normal, the occasional visits of educational lights, and our own efforts, we hope to hasten the good time when even Egypt's darkness shall be penetrated.

HENRY ARMSTRONG, County Supt.

Will County.—The Institute held its annual session July 10-14. There were one hundred and fifty-nine enrolled. The exercises were conducted by the Superintendent, Mrs. MCINTOSH, O. P. BLATCHLEY, of Elwood, W. S. MILLS, of Joliet, A. W. BRAYTON, of Englewood; F. SEARLES, of New Lenox, A. A. MANSON, of Will, Miss STARBUCK, and several others. The exercises were enlivened by readings, humorous and otherwise, and by excellent music.

Rev. S. A. REEVES, of New Lenox, gave one evening lecture.

Much enthusiasm was aroused, and good results may be anticipated.

Clark County.—The following resolutions were adopted at the close of the County Institute:

WHEREAS, We the members of this Institute recognize in Professor KILBORN, L. WALLACE and Superintendent PIERCE, earnest and energetic workers for the cause of education, and whereas we deem ourselves indebted for many favors and privileges tendered us during this Institute, therefore be it

Resolved, That this Institute has been a success, and that it has far surpassed our most sanguine expectations.

Resolved, That we hereby tender a vote of thanks to Prof. L. S. KILBORN, L. A. WALLACE and Superintendent PIERCE, for their untiring efforts in our behalf, and for the teacher's cause in general.

Resolved, That we tender our thanks to the school board for the use of the school building.

Resolved, That we tender our thanks to the Congregational Church Society and M. E. Sunday School for favors.

Resolved, That this Institute tender their thanks to J. W. GRAHAM, for his highly interesting readings.

Resolved, That we tender our thanks to REVS. GRAVES and DAVIS, and Hon. H. C. BELL, for their instructive lectures.

Resolved, That we instruct our Secretary to furnish for publication a copy of these resolutions to the *Messenger* and *Herald*.

Laura ARBUCKLE,
W. A. H. CODAY,
A. H. GIDEON. } Committee.

The following are the names of teachers employed to teach the schools in Marshall, during the term commencing the 4th day of September, in the College:

Professor L. S. KILBORN, principal; LEA WALLACE, S. G. MURRAY, Miss LAURA ARBUCKLE, Miss MARY SHAW, Miss SUSAN QUICK. South side School House, DAVID E. PRITCHARD, Miss HATTIE KNOWLTON. We think the Directors have secured as fine a corps of teachers as has ever been employed to teach in Marshall.—*Exchange*.

McLean Co.—The McLean County Teachers' Institute closed a three weeks' session on Friday, August 25th. Total enrollment 226; average daily attendance 189. Instructors, Profs. BURRINGTON, PAISLEY, FORBES, and CARTER, Drs. SEWALL and MARSH, and the Superintendent. The "common branches" were given the foremost place in all the work of the Institute. It is the belief of the best educational people of this county that better instruction is needed in these "common branches," and that the children should be well versed in these before attempting to do much with the "ologies and oeophies." With this in view an attempt is making to dignify the second-grade certificate, when the same is issued on a high standing. Many teachers in the county who were intending to spend their time in the Institute upon the sciences, with the view of obtaining a first-grade certificate, have rather devoted themselves to the "common branches," and now go forth feeling, that while their certificates may be of second grade, their standing is *first-class*, and that they are prepared to do first-class work in these fundamental branches. It is believed that the result will show a marked improvement in the school work of the county. No beginning classes in the sciences were organized during the Institute; these classes were therefore small, but they were able to do genuine first-grade work. The Institute was a success both as to numbers and work accomplished.

The following resolutions were unanimously adopted:

WHEREAS, To-day closes this session of the McLean County Teachers' Institute, which we feel has been of great benefit to those in attendance, we deem it but just to offer the following resolutions, expressive of our appreciations of the efforts put forth to make the exercises both interesting and profitable; therefore,

Resolved, That to Mr. SMITH, our Superintendent, we tender our sincere thanks, for his earnest and untiring labors in our behalf. We recognize in him an energetic and efficient Superintendent, an excellent teacher, and a warm friend to teachers and the cause of education.

Resolved, That to the teachers who have so ably and successfully instructed us, as well as to those who have addressed us at different times, we hereby express our hearty thanks.

Resolved, That to the Trustees of the Wesleyan University, who have so kindly permitted us to use this pleasant and commodious building, we acknowledge our indebtedness, and feel deeply grateful for their kindness.

Resolved, That copies of these resolutions be sent to the city papers, and to the ILLINOIS SCHOOLMASTER, for publication.

PERSONAL.

CHARLES I. PARKER takes the Oakland, Cook Co., schools.

CHARLES DEGARMO has been appointed principal of the Grammar Department of the Model School at Normal.

JOHN B. WARD continues in charge of the Du Quoin schools.

E. C. H. WILLOUGHBY is employed as principal of the Pinckneyville schools.

D. C. ROBERTS takes the chair of Mathematics in the Cape Girardeau Normal.

BUSINESS ITEMS.

SCHMITZ'S GERMAN GRAMMAR.—This is a text-book for the practical study of the German Language, by J. ADOLPH SCHMITZ, A. M., Professor of Modern Languages and Literature, in the University of Wooster, O., and HERMAN J. SCHMITZ, A. M., Instructor of Modern Languages, in the Newark Academy, Newark, N. J.; published by J. B. LIPPINCOTT & Co., Philadelphia.

All the systems which the genius of educators has devised to increase the facilities for the study of foreign languages may be classed under two heads: the Grammatical Method and the Natural Method.

All grammars, methods, helps, etc., that have ever been published either follow one of these to the exclusion of the other, or taking the one for the basis, unite with it as much of the other as seems indispensable in reaching the object in view. Which of these methods, or to what degree both of them, ought to be followed is the question which every intelligent teacher must weigh well in his own mind and decide, carefully considering the different objects aimed at in the study of ancient or modern languages; for if the chief end is grammatical training and intellectual culture, the knowledge of the language studied being rather incidental than aimed at, or if the acquisition of a mere reading knowledge in connection with philological training is the object of the student, the method will necessarily differ from the one pursued if the principal aim is the acquisition of a reading, writing, and speaking knowledge of the colloquial, scientific, or sublime style of the language.

These remarks are not intended as an essay on the methods of the study of language, but rather are preliminary to the discussion of SCHMITZ'S German Grammar, lately published by J. B. LIPPINCOTT & Co., Philadelphia; the system of which, though in many points in harmony with other systems previously published, in some points essentially differs from them, and claims superiority over them.

But superiority is claimed by all writers of school-books, which makes it necessary, first, to determine the standard of highest excellence of works of the kind, and then to see whether this grammar reaches this standard, or how far it fails to do so. It seems to the writer that a work which complies with the following conditions has attained the true standard of practical German Grammars:

1. *The specific aim must be such that its attainment is most desirable to the student.*
2. *This aim must be attained in the shortest time, with the least labor, and in the most attractive manner.*

The general aim of almost all works written for the study of the German language is to aid the student in learning to read, write, and speak it, correctly; i. e., to gain a knowledge of it nearly, or rather wholly, equal to that of his native tongue.

Some authors, thinking they could best aid the student in the pursuit of this general and final aim by following the Grammatical Method, made it their specific aim to present to him a scientific system of the rules of Etymology and Syntax, with sentences illustrative of these rules.

While it cannot be denied that some of these works, written with this aim in view, have done and are doing excellent service in promoting a thorough acquaintance with the language, it is evident from their wholly theoretic character, that if used by beginners, though they be scholarly and highly cultured men, they fail to give them the knowledge they need most, as well for reading, as for writing and speaking, the German language. At the very best, with the aid of unremitting reference to the dictionary, they will merely enable the student to gain a reading knowledge of the language. Unless used as works of reference, the great benefit to be derived from them is not so much found in the help they afford the student in mastering the language, as in the mental training they give, and the better knowledge of the German Language which they impart through a logically necessary comparison.

Another group of authors, believing that the student is aided most, in his efforts to acquire the German Language, by leading him along in the way in which a babe acquires its mother-tongue, exclude all systematic study of Grammar, and teach the forms of inflection, as well as principles of Syntax, by their application in sentences, but without rational explanation.

This method would be the only correct one, if the mental condition of the student were on a level with that of a baby learning its mother-tongue, or if the learner were not a student who could make use of his intellectual powers, but, either from want of time or ability to concentrate his thoughts upon one subject, or from idleness, were only willing or able to acquire the language as a parrot acquires articulate sounds.

Very small, indeed, is the number of works which attempt to follow the Natural Method exclusively, whose specific aim is to present to the student the German language in the order in which a baby in Germany acquires it, without uniting with it in some degree the advantages offered by the Grammatical Method.

When works like OLLENDORFF'S, AHN'S, etc., profess to teach the German language according to the Natural Method (no knowledge of the English being presupposed on the part of the student), yet constantly employ grammatical terms that imply a knowledge of the classification of words and sentences, an elementary knowledge of inflection, derivation, and even Syntax, it is a silent acknowledgment that no method used by any pupils but infants, or such as are entirely uneducated and wholly ignorant of grammar, can dispense with some of the elements of the Grammatical Method.

A third class of writers, believing that neither the Grammatical nor the Natural Method is practical, but that a happy union of the two would lead to the best results, make it their specific aim to teach the German Language to students of other nations in the manner in which the babe begins to learn its native language, but not without taking into due consideration the difference of mental development, thought, power and absolute knowledge, existing between them, and hence infusing the Grammatical Method, apparently incidentally, yet in fact with forethought and as completely as the student's limited amount of time and labor permits.

From the above, it is clearly seen that neither works following the Grammatical Method exclusively, nor those following the Natural without making use of the Grammatical Method, have set before them a mark which the student of the German language is most desirous to reach. Hence it would be useless to show how far they failed to reach their specific aim, since even complete success of their system could not place them in the foremost rank of text-books for the study of the German language.

To those who have gained a fair knowledge of the language, and who wish to complete their knowledge of the Science of German Grammar, synthetic works, like RECKER'S, GLAUBENSKLEIS' HILNER'S, ROESE'S, AUE'S, WHITNEY'S, etc., etc., might, indeed, be of value as books of reference, but, only inasmuch as in addition to their proper sphere they take on them, in part, the office of the dictionary, in rendering idiomatic phrases, or comparing, philologically, English and German words. The proper office of such works, treating of the Etymology and Syntax of the German language, is better and more completely performed in many German grammars written for the use of Germans.

It is, then, to works that help the student in learning to read, write and speak German, and to do this by following a method which is the result of a judicious and practical union of the Grammatical and Natural Methods, that all further remarks are limited. While nearly all of them have their peculiar merits and have thrown light on special features in the study and instruction of the German language, very few, indeed, attain to their aim by *guiding* teacher and student, while a number of them reach it, if the intelligent teacher takes the pains to follow their hints, and, with the aid of the material gathered in the text-book, but independent of it, develops the system advocated by the author. A method like OLLENDORFF'S, for example, undoubtedly deserves to be highly esteemed as a practical text-book; and it cannot be questioned that it reaches its aim of teaching to read, write, and

speaking German; but it fails to do this directly. It only accomplishes its end under the guidance of a judicious, intelligent, and able teacher. For it professes to teach the reading of German, yet presents to the student not a single reading exercise. It is true that its many translating exercises render the student familiar with the forms of the German, and thus serve as a preparation for reading; but it is only when the teacher is judicious and intelligent enough to unite, with these, progressive reading, that the end is accomplished.

It professes to teach conversation, yet in no instance does it draw from the pupil an answer to a question (except perhaps a previously memorized phrase). It reaches this result only by the frequent translating and memorizing of often repeated questions and answers, through which the student becomes accustomed to the forms, and habituated to their use.

On this the intelligent teacher bases free conversation; not taught, but hinted at in the text-book. In a similar manner other works, e. g. AHN'S, PEISSNER'S, RUTEL'S, KELLER'S, ROHNY'S, EICHHORN'S, KRAUS'S, etc., besides paying too little attention to the systematic study of grammar, neglect in their systems either reading, writing or conversation. To WOODBURY credit is due for having advanced the method of a union between grammatical and natural development in the study of the German language. Even the first edition of his *New Method* showed a decided improvement on Ollendorff's method, first, in that the author paid proper attention to the development of a system of grammar which the student is able to grasp as a system, and secondly, by giving explicit direction to the teacher and student, for original composition in German.

The omission of exercises in reading was a mistake which was remedied in the Revised Edition. In this, then, we have for the first time a work which, besides having for its aim that which the student is most desirous to obtain, also complies with the main conditions for its attainments. But the method fails to work out the advice which it gives with regard to free composition of sentences, and fails to extend it to extempore composition of sentences, or to conversation. It devotes one page to theoretic advice, a few pages to long lists of words which may be used in acting on its advice, and without further stimulus to self-exertion on the part of the student, drops the subject never to take it up again. While this method is a great improvement on those which preceded it, while it attains its object more directly than any other previously published, it fails to give free conversation its due share in the study, and hence does not satisfy the highest demands which may be made upon it.

With various modifications, but without great improvement, this method was employed by other writers. DONAY, for example, regarding the second part of WOODBURY'S method of greater importance than the first, attempted to improve upon it by writing a Synthetic grammar to which is prefixed a few practical lessons, but without any guidance to original composition or conversation.

COMFORT, with true comprehension of the value of WOODBURY'S first part, confined his improvements to typographical changes, changes of the relative position of idiomatic phrases and conversations, German advertisements, reading exercises, and philological comparisons of German and English words.

COMFORT succeeded in publishing a text-book more satisfactory than WOODBURY'S new method, rather by the judicious abridgment of the first part, and a more attractive typographical arrangement, than by the additions of parts second and third, or the philological comparisons introduced into part third.

WOODBURY attempted to improve his work, but the result was not a success; his complete course presents no change of method; the philological comparisons introduced into it are no improvement; the execution of its plan is not superior to the author's *New Method*.

In OTTO'S Conversation Grammar, a work was presented to both teacher and pupil, which in many respects satisfied their demands. Its method is a decided improvement on other works which preceded it. Proper care is given to reading; translating from English into German is not neglected; conversation is taught (not merely hinted at) from beginning to end, and its system of grammar is sufficiently extended.

The defects of this work do not lie in the method, for its design is to impart in a naturally progressive manner a systematic knowledge of grammar, with a comprehensive vocabulary, and exercises; but in the execution of the method defects are found.

It is progressive in the presentation of the difficulties of the language, but its progressiveness is not graded in accordance with the development of the student's knowledge of the grammar; its superabundance of lists of words and phrases does not recompense the student for the expense of time and labor needed to learn them; its system of grammar is not only difficult but in many points incorrect.

Many other works might be discussed, but those mentioned, being most distinguished by popularity and originality of design, may suffice to show that there was no work published, which satisfied the demands of the teachers and students of the German language, prior to the publication of the Grammar, the discussion of which is the subject of this article.

To the Professors SCHMITZ the American Public is indebted for the publication of a work which attains its aim of teaching to read, write and speak German; by presenting, in gradual progressiveness, a comprehensive and correct system of German grammar, a well-selected vocabulary, and many idiomatic phrases which are mastered by the student through their continuous and extensive application in reading, writing, and conversational, exercises. The volume of the work is small, requiring for its mastery less labor and a much shorter time than any other work with which we are acquainted. The authors are evidently teachers of large experience, as only by experience could they have been taught not to present the student long lists of rarely-used words and idiomatic phrases which were not applied in practical exercises, and to omit all philological comparisons of German and English words, which are either a plaything or a puzzle to the student commencing the study of German, and which are very unsatisfactory to the scholar who is able to understand the comparative philological study. These authors have not burdened their work with a part, or division, devoted to the Syntax of the German language, but instead have presented to the student, in their systematically arranged Index, an excellent manual of Synthetic German grammar.

The execution of the work is in harmony with the excellence of its method.

Says a lengthy review of the book:

"Just here (i. e., in the mode of attaining its aim) as we take it, is to be found the superiority of the work of the Professors SCHMITZ over others of similar character. It differs, and differs to surpass in certain most important respects, from other textbooks of its kind. It is certainly unsurpassed in the clearness, completeness, and compactness of its grammatical theory. The authors have made wise use of the great German grammars of GRIMM & BECKER in laying their basis of principles. They have profited by all the works of previous authors, in their own. The experience of the class-room has aided them. They have done good, strong thinking for themselves. We have one of the fruits of all this varied preparation in the thorough and compact grammatical system embodied in the book itself and outlined in the Index, with which the volume opens." "The general plan is to begin with the simple elements and proceed gradually to the most complex. By first completing the system, taking in all the necessary parts, and then intelligently deciding upon the relative difficulties of the parts and principles, it was made possible to secure such progress and to guard against those places of accumulated difficulties, which appear in so many Grammars as the result of half-formed or ill-digested schemes, and which are a terror to all learners. There is a steady and easy progress from the letters, syllables, and words at the opening, to the reflexive, reciprocal, and impersonal forms at the close. The plan pursued throughout the fifty-two lessons, of which the volume is composed, is peculiar. It is the order of nature in learning a language. The rules and principles appear first, not in abstract statements, but, as the child naturally meets with them in acquiring his own mother-tongue—in concrete form, embodied in translated examples, and then illustrated in a German exercise, with reference to the principles elsewhere stated, and in an English exercise, with like references. The principles which have thus

been made familiar are next distinctly stated and numbered in the observations. These principles are subsequently taken up and applied intelligently in a general exercise in translating English into German. The whole is then completed in the most important of all exercises—the one without which any such system must prove comparatively a failure in giving a practical knowledge of the language—the conversation exercise. This method is carried through the entire grammar. The teacher who follows it with thoroughness may reasonably expect the most gratifying results."

"There are none of the long lists of German words under certain rules, and the almost equally long list of exceptions to other rules, with which most grammarians seem to enjoy frightening and discouraging timid learners. The method obviates the necessity for the painful old-time process of committing such lists to memory. The work of improvement is especially noticeable in simplifying the treatment of the chief topics—notably of the declensions and conjugations. Following GRIMM, two declensions, the old and the new, are maintained throughout all declinable words, whether substantive or adjective. [See p. 48.]"

"The use of the two declensions of adjectives is given in one simple rule not found in any of the other grammars, so far as we are acquainted with them. [See p. 99, § 144.] By a single stroke the lumber and confusion of the common method are avoided, and what otherwise seems to the beginner to involve almost an infinitude of complications is reduced to clearness and simplicity. The verb is treated under the old and new conjugations. [See p. 60]. The irregular verbs are treated under these two conjugations. The resemblances many, the differences few; hence the advantage of the method. Instead of plying the learner with a few formidable lists of these verbs, as is usually done, this work gives a short outline of their characteristics [p. 162], the rules for the formation of the tenses [pp. 164-5], and then from Lesson XXXVI onward, several of the verbs themselves, in each vocabulary, requiring their use in the exercises, until a perfect familiarity with them is acquired without any of the ordinary difficulties. One of the strong objections to many of the grammars cannot therefore be urged against this one. Following BECKER the treatment of the Subjunctive and Conditional Moods is different from that of all other German grammars published in America. It makes these two distinctive moods, and thus avoids the complication and confusion which result from the attempt to consider one of them as only a modification of the other. [See pp. 134-138.]

It is a pleasure, indeed, to take up a volume so highly deserving of praise. The typography of the work is beautiful and very practical, the paper is very good, the binding strong and very handsome. Authors and publishers have evidently taken good care to make the book excellent in every respect, and they have succeeded well. It will prove highly satisfactory to every intelligent teacher, and, without doubt, will meet with the extensive circulation which it merits."

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ILLINOIS TEACHER, }
Volume XXII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

OCTOBER, 1876.

NUMBER 101.

ADVICE TO BEGINNERS.—VIII.

In my last article, printed in the May number of the *SCHOOLMASTER*, the word *had* in the first column of Chart I should have been *and*; and in Chart II the similar letters of the several alphabets should have been in columns, instead of which the small letters were printed in shorter lines than the capital letters.


The next subject of Grade I to be considered is Number. This article will be limited to plans of easy practice, and hence may be noticeable for its many omissions, if for nothing more.

Many pupils are able to count 100 upon entering school. If yours can not, teach them to do this, using any convenient objects, as kernels of corn, beans, pebbles, etc., to give, by association, ideas of the value of numbers. Then have the pupils count 9 as you raise your finger at irregular intervals, thus securing a continuous attention. Next place the figures, 1, 2, 3, 4, 5, 6, 7, 8, 9, in a line at the top of your blackboard, and with your assistance the class will soon learn to read and write them. When this work is well done, write several 1's in a column on your board, draw a line underneath, and have your pupils count as you point to them. This done point, in order, to the figures at the top of the board, and ask them to name the one when you reach it that shows how many 1's there are in the column. Place a like figure below the line, underneath the column of 1's. Have the 1's in column counted in an opposite direction, to show the number of them to be the same, and to give further practice. Pursue the same plan with several columns of 1's, until the pupils are quite ready in counting and finding the figures to be placed below the lines as sums of the respective columns.

Next, place slates and pencils in their hands, and give them a drill in holding them, in writing, erasing, and folding of arms, as you order them. Then have each copy upon his slate a column of 1's as you write them upon the board, and try to count and place below the line like figures showing the

number of 1's he has copied. Some of the class will be able to do this at the first trial; others will need further instruction. Keep at this work until the pupils can copy and add 1's, and place the figures to 9, showing the sums obtained. You may have to give them a hundred examples before all can do the work quickly and correctly.

To make the most of the time for such a recitation, mark with paint a line upon your school-room floor like this,

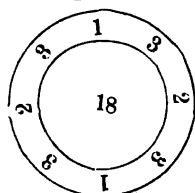


in such a place that your pupils can stand facing the blackboard, toeing the long line, and each with a foot on either side of a short mark. When an example has been placed upon the board, copied and solved by the pupils, take the slates as fast as the pupils have finished the work, placing them one upon another in order as handed to you. Then with the aid of the pupils solve the example as upon the board. Turn the pile of slates, thus bringing uppermost the one first handed you. If this slate has a correct result, let the pupil who has done the work, if not at the head of the class, pass to the head, because he obtained the answer first, and have the pupil that has been at the head take the vacated place. If the result was not correct, return the slate, and have the pupil keep his position in the class. Pursue this plan, handing out the slates one by one, and when done your pupil that had the second answer will stand second, and so on, while all that had incorrect results will stand in the lower part of the class. To prevent confusion, let the ones going down pass back of the class. They will soon learn what you wish them to do, and you will be surprised at the incentive there will be for rapid and correct work. Follow this plan more or less all the way through your class-work in slate arithmetic.

When 1's can be counted or added to a sum of 9, teach the pupils to read and write numbers to 19, extending the list at the top of the board. Next teach them to add 1's and 2's to 19 as you raise one or two figures at a time. Then place a 2 with several 1's in column on the board, and show the class how to add them. Continue this until you think most of the pupils understand what to do and then write an example of 1's with a single 2, for the pupils to copy and add on their slates. Some will get a correct answer at first and others will need farther explanations, and all should be given many examples for practice. Next give many examples, each having two 2's with several 1's in column for them to add. When this work is well done to a sum of 19, teach the reading and writing of numbers to 29, and in the same manner teach them to add a 3 with 1's, then two 3's with 1's, then a 3 and a 2 with 1's, etc., etc., always giving many examples for slate

practice to secure rapid and correct work, and continue this plan until you secure the results called for in the grade.

To aid in securing rapid and correct work in addition, draw a diagram upon your board, placing therein figures as follows :



Point to a figure and give the direction for a pupil to add, and see how many seconds it will take him to obtain the result, 18. Let another pupil try to obtain the result in a shorter time, and so on, always changing the place of beginning and the direction of adding until they grow in power ; then give larger numbers and more of them. You will find this an excellent practice for your larger pupils in more advanced classes.

Continue the work of teaching pupils to read and write numbers as called for in the grade. Have them write the numbers in columns upon their slates, at first from 1 to 9, then from 1 to 19, then from 1 to 29, and after a time from 1 to 99, then from 100 to 199, 200 to 299, and so on.

To get them to read numbers rapidly, stand at the board and write them rapidly, quickly erasing them, having the pupils trying to read them at sight. Sometimes write the numbers in the order of units, tens, hundreds, sometimes tens, hundreds, units, etc.

When the pupils can well add long single columns of numbers excepting the largest, it will be well to commence to teach them to add units, tens, and hundreds, each sum 9 or less. Put upon the board numbers for addition, as for instance 21, 12, 11, and 34. Ask how many rows of figures, and how many in each of their former examples. Teach the new column, its spelling and what it means. Tell them these columns have names. One boy's name is Charles and another's name is Robert, but these columns are not named Charles and Robert. Give them the names, units and tens, and call for them by pointing, having them say units, units, tens, units, tens, etc., as rapidly as they can. Then have them numerate as you point to the figures of each number, then numerate as you point to any number as a whole, then enumerate or read as you point and command, as units, tens, eleven, thirty-four, twenty-one, units, tens, units, tens, thirty-four, units, tens, eleven, etc., etc. In a short time with this practice they will become as familiar with the names of units, tens, and hundreds as with their own

names. Teach them to spell these words. Teach them to add the columns naming the units and tens as they add them. Teach the words, *sum* and *addition* and their spelling.

Continue this work as far as the grade requires. For seat work place upon the board in the morning at recess or at noon, from ten to twenty examples, such as you wish them to practice upon, and at time of recitations have the pupils bring them solved upon their slates. Let each that has a correct result for the first example take a step forward, and then move toward the foot of the class, those in advance then stepping backward to again be in line. Continue this until the written work is all examined. Two or three minutes will suffice for twelve or fifteen examples, if you have the answers on paper at your command.

The addition and subtraction tables called for in the grade should be taught so well that the pupils can give them orally or write them.

The signs $+$, $-$, and $=$ should be taught, their names with spellings, and their uses.

The written tablework should be mostly upon slates, and you should see that it is well done, figures and signs in columns, of right sizes, etc., and not in the manner so often seen upon blackboards in many schools.

For the pupils at their seats place upon the board work to be copied where results are to be obtained, as follows :

$3+2=$	$8-3=$	$2+6=$	$8-4=$
$4-3=$	$5-1=$	$4-2=$	$7+2=$
$5+4=$	$4-1=$	$7+3=$	$9-5=$
$6-5=$	$6-3=$	$9-6=$	$5+2=$

Call for the work in its time, having pupils read from their slates the numbers, signs and results, always giving some acknowledgment for neat as well as correct work.

The reading and writing of the Roman numbers should always be in advance of the number of the reading lesson, that the pupils may have no difficulty in giving it for any lesson they commence to read.

Many examples naming objects and denominations should be given to give the pupils a practical application of their knowledge of the addition and subtraction of the grade.

E. L. WELLS.

SHAKESPEARE uses the expression, "God Save the Mark !" in Henry IV., Part I., Act V., Scene III. It was current in the days of archery. When a man was about to shoot, he exclaimed, "Heaven save the mark !" meaning either—keep me from striking and destroying it, or keep anyone else from going nearer. Beginners who shot wide, would be greeted with this exclamation in irony. Hence, generally, it became an ironical expression.—*Christian Union*.

SOME KINDERGARTEN PRINCIPLES.

They were not invented by PESTALOZZI nor FROEBEL, for they are as old as eternity, being founded on the laws of mind. We propose to recapitulate them for the benefit of common-school teachers, for, though apparently self-evident truths, we are liable to forget or neglect them : Kindergarten (child-garden), the place where the child may grow; this is the key to the whole system. Its fundamental principle is that all true education is a growth from within, not an accretion from without; a symmetrical development of all the faculties God has given, in God's own appointed way. His way is that growth must come from self-activity; the unused faculty, whether of body or mind, shrivels up and dwindles away. Hence our first work, as teachers, is to induce self-activity in the growing human being. He must do his own growing, mentally and physically, hence he must do his own working, and any system is faulty which spares pupils wholesome labor. It would be just as logical to eat the child's dinner and expect him to be nourished thereby, as to do his mental work and expect him to gain strength by the exercise.

Growth, to be healthy, must be gradual and continuous; slow enough to gain time for thorough assimilation; steady, with out leaps or breaks. It must commence at a definite point and follow out definite laws. The child needs first to take possession of his own organs, his hands, his eyes, all of his bodily senses: then, in like manner, through these senses, to take possession of the world around him. Facts are what he is after; his reasoning powers do not develop so early as his powers of observation.

Thus our earliest work is the training of the receptive faculties; but if these alone are trained the development is unsymmetrical; the training of the expressive faculties must go with this, hand in hand.

The alphabet of letters, so often the recognized means of expression, is but one of the alphabets in nature's great text-book, and not the one she first presents to the dawning consciousness of the child. The alphabets of color and of form precede it: hence the philosophical order is, present for the child's study things, the embodiment of color and form, before words, the embodiment of ideas often abstract and unknown.

PESTALOZZI says truly that the man who has only word-wisdom is less susceptible to truth than is a savage. This mere use of words produces men who believe they have reached the goal, because their whole lives have been spent in *talking* about it, but who have never run towards it, because no motive impelled them to make the effort.

The old education considered language the only means of expression : the new education takes the hands into this partnership. The child can express by his hands, in the laying of sticks, the arranging of blocks, and the modeling of clay, ideas of beauty and symmetry that his tongue has not yet mastered. On this depends the value and the philosophy of the education by play, as it is termed—really, education by work, for play is but the highest form of work, our preconceived notions to the contrary, notwithstanding. Play is the full, free, spontaneous action of our faculties of body or mind ; the element of spontaneity being the grand line of demarkation between work and play.

To induce this spontaneous action of the child's faculties is the object of the gifts and occupations of FROEBEL ; in these gifts and occupations, their arrangement and sequence is the deepest philosophy, the result of thorough knowledge of child nature. The end of the occupation is not what the child makes, but what he learns in the making ; its value lies in the training he receives to make *something*, not to aim at nothing and hit it, as too much of our teaching does.

It is an old saying that you can tell what kind of a man a boy is going to make by noticing how he whittles a shingle ; if he whittles it "all to nothing" he will be apt to make nothing of himself in his life-work ; if he whittles it into definite form,—that is, makes something of it—he will be apt to make something of himself. We need to beware lest our teaching train our scholars to whittle the shingle into nothing but chips and shavings. Kindergarten principles and practices guard against this danger.

Here is a Kindergarten precept which it is well for our primary teachers to remember and practice : "Prepare a little child's work for him so that he will succeed." Nothing is so encouraging as success ; it is the most healthful stimulant to that self-activity we wish to induce. Once aroused to activity, children are usually active enough ; what is then needed is right direction of this activity, not its repression. The Kindergarten is but the embodiment of the "Do" principle in education, for which wise men contended before Kindergartens were invented. Let us take this principle into our school-rooms, and embody therein the maxim of wise old Father LOCKE : "Remember, children are not to be taught by rules which will be always slipping out of their memory. What you think it necessary for them to do, settle in them by indispensable practice."

MARY ALLEN WEST.

THE MINISTERING ANGEL.

"Once upon a time," on a summer's day, in the afternoon, a village school overcome by heat, confinement, and the spirit of mischief, had by various misdemeanors common to such little people, exhausted the good nature of the teacher. It was one of those afternoons which come sometimes in school life, when meddlesome "Nick" turns books and brains upside down, and everybody says, "That's right, keep on; we'll all help." Even the "best boy in school," Joel Goodhue, joined the ranks (a little in the rear), and as for the "worst boy," Tom Teazer, he found his match in more than one instance on this occasion.

Black marks, zeros, and checks, were too numerous to mention. T. T. having received twenty ferule strokes for pulling a long golden hair from Daisy Dow's head, sulked and idled. Master Snip, a small boy out at the elbows, but in for fun, stood in the corner blindfolded, for touching the tip of his little pug nose to the inkstand, and then looking about with an air of mock innocence at the gigglers, as much as to say, "Wat ye'r laughin' at?" Mary Smallweed, pretending to cipher, was detected in designing an outline not suggested by the drawing manual; to-wit, a bald-headed profile, blink-eyed and long-nosed, with the word *Teacher* underneath. A little girl who failed on the word "feathers" (which she spelt f e - t - t - e - r - s) cried to be let loose and go home. A little boy cried about nothing in particular, except to help the game out. A large boy dropped his slate and picked it right up, so as to have it all ready again to drop at the next favorable opportunity.

Mischief frolicked behind the first class in geography, the second class in reading, and the third class in arithmetic, down to the last youngster that stood at the foot of the primer class, trying to place his little ragged toes "on the line," and read, "It-is-a-hot-day. Let-us-go-to-the-woods-and-find-a-cool-place." I have no doubt that acting upon the suggestion from the primer, an impromptu picnic would have been a mutual delight to all hands. In the midst of snickering, bustling, murmuring, imitative sneezing, drowsing, and general restlessness, a little hand, like a white lily out of a bubbling stream, rose up, and a little voice piped, "Pleath can we thing John Brownth body?" With the happy thought of the child came a deeper one to the teacher, who seemed to hope that through music the troubled waters might be calmed, as she smilingly consented to the gentle request. Of course there was a general rush and smash for singing-books; but when each listening ear could hear the clock tick, and the song came forth, how the chorus swelled and burst from every heart! How the young forms sat

up in orderly array, and raised their happy voices! How comfortably the teacher leaned back in her chair with folded hands! Little Snip in the corner, blindly forgetful of his smutty nose and punishment, felt that *his* heart and soul could "march on" in song, and lead all the rest, which he did successfully. Even Tom Teazer, who sulked through the first two verses, hustled out his book and found the place just in time for the third chorus. The summer breeze blew in and out, carrying the "Glory, glory, Hallelujah," across the meadows and cornfields, where each silken tassel caught the mighty strain and tossed it to its neighbor. The honey-bee buzzed away, to carry the enchanting notes to the hearts of all the wild flowers; and what with insect voices above and below the grass, and the joyous carol of the birds, the sweetest concord that ever filled the air came echoing back to the old red school-house.

Then the children sang, "Love one another," "The happy days at school," and "Jesus, tender Shepherd," and somehow when lessons were resumed, a quiet, earnest interest seemed to have dropped like a holy spell upon the young assembly.

When the hour of dismissal came, and the long line, one by one, passed out on tip-toe, who was the last scholar that looked real sorry, and tried to tread softly as best he could, with his weather-worn, clumsy cowhides? Why, T. T., of course. * * *

How fondly welcome to the school-room must that power be, which can sometimes lift the little hearts out of weariness, and, like a fragrant summer rain, cool the heat of long-tried patience, carrying away with its gentle departure, all the dust of ill-temper and naughtiness.—*New England Journal of Education*.

LANGUAGE.

THIRD GRADE.

OBJECT.—To teach pupils to write the English sentence as it appears on the correctly written or printed page.

The principles given in this series should be *developed*. Most of the laws should be *discovered*; some of the laws must be *dictated*.

Only a small portion of the time allotted is necessary to teach the facts presented. The time should be spent mainly in practice under the laws learned. Abundant material for practice is found in the reading lessons which may be dictated for the pupils to write; as well as in the Human

Body-, Plant-, Animal-, Place- and Form- Work which should be written as fast as learned; and in the statements, definitions, rules and analyses in connection with the Number Work.

(FOUR MONTHS)

I.—Develop idea and teach definition of a sentence.

II.—Have pupils learn law for capitalization of the first word of a sentence. (DISCOVERY.)

III.—Develop idea and teach definition of a telling sentence. Have pupils learn law for closing a telling sentence. (DISCOVERY.)

IV.—Develop idea and teach definition of an asking sentence. Have pupils learn law for closing an asking sentence. (DISCOVERY.)

V.—Develop idea and teach definition of a commanding sentence. Have pupils learn law for closing a commanding sentence. (DISCOVERY.)

VI.—Develop idea and teach definition of an exclaiming sentence. Have pupils learn law for closing an exclaiming sentence. (DISCOVERY.)

VII.—Develop idea and teach definition of a noun.

VIII.—Develop idea and teach definition of a proper noun. Have pupils learn law for capitalization. (DISCOVERY.)

IX.—Develop idea and teach definition of a common noun.

X.—Teach that the words I and O should always be capitals. (DISCOVERY.)

XI.—Develop idea and teach definition of the singular form. Develop idea and teach definition of the plural form.

XII.—Have pupils learn the general laws for the formation of plurals. (See Plan next month.)

XIII.—Develop idea and teach definition of the possessive form.

Have pupils learn how the possessive singular form is made. (DISCOVERY.)

XIV.—Have pupils learn how the possessive plural form is made. (DISCOVERY.)

XV.—Have pupils learn how the plural form is made when the singular ends in the sounds of s, sh, z, ch, x and j. (Special law No. 1.) (See Plan next month.)

XVI.—Have pupils learn how the possessive forms, singular and plural, of nouns given in XV, are made. (DISCOVERY.)

XVII.—Develop idea and teach definition of quoted words. Teach use of quotation marks. Have pupils learn law for the capitalization of the first word of a quotation. (DISCOVERY.)

XVIII.—Develop idea and teach definition of the contracted forms of words. Have pupils learn the use of the apostrophe. (DISCOVERY.)

(THREE MONTHS.)

XIX.—Develop idea and teach definition of the abbreviated forms.

Have pupils learn law for capitalization and punctuation of abbreviated forms. (DISCOVERY.)

XX.—Teach the use of the comma in a succession of particulars when and is omitted.

XXI.—Teach how the plural form is made when the singular ends in *y* preceded by a consonant. (Special law No. 2.) (DISCOVERY.)

XXII.—Teach how the plural form is made, when the singular ends in *y* preceded by a vowel. (General law.) (DISCOVERY.)

XXIII.—Teach how the possessive forms, singular and plural, of nouns ending in *y*, are made. (DISCOVERY.)

XXIV.—Teach how the plural is formed when the singular ends in *f* or *fe*. The pupils should learn lists of words.

XXV.—Teach how the possessive forms, singular and plural, of nouns in *f* or *fe* are made. (DISCOVERY.)

XXVI.—Teach how the plural is formed when the singular ends in *o*. The pupil should learn lists of words.

XXVII.—Teach the possessive forms, singular and plural, of nouns ending in *o*. (DISCOVERY.)

XXVIII.—Teach the plurals of nouns whose forms are changed irregularly. The pupils should learn lists of words.

XXIX.—Teach the possessive forms, singular and plural, of nouns given in XXVIII. (DISCOVERY.)

(THREE MONTHS.)

XXX.—Teach nouns that have the same form in singular and plural. The pupils should learn list of words.

XXXI.—Teach nouns that are used only in the singular. The pupils should learn list of words.

XXXII.—Teach nouns that are used only in the plural. The pupils should learn list of words.

XXXIII.—Teach the possessive forms of nouns given in XXX, XXXI and XXXII. (DISCOVERY.)

XXXIV.—Teach the plurals of letters, signs and marks. (DISCOVERY.)

XXXV.—Develop idea and teach definition of compound words. Have pupils learn the use of the hyphen in compound words. (DISCOVERY.)

Have pupils learn law for making the plural of compound words. (DISCOVERY.)

Have pupils learn use of hyphen at the end of a line. (DISCOVERY.)

XXXVI.—Develop idea and teach definition of (*a*) simple words, (*b*) derived words, (*c*) base words.

XXXVII.—Have pupils learn law for the capitalization of the first word of every line of poetry. (DISCOVERY.)

XXXVIII.—Have pupils learn law for the capitalization of the names of Deity. (DISCOVERY.)

XXXIX.—Teach the use of the comma (*a*) to separate an inverted member from the rest of the sentence, (*b*) before and after parenthetical portions.

XL.—Teach the use of the semicolon when there is greater separation of parts than is indicated by the comma.—*Aurora Course.*

HISTORY IN SCHOOL.

The manner, at present most generally followed, of teaching American History in the common schools of our country, is perhaps a remarkable failure in attaining the ends arrived at. But it is in nowise a greater failure than the histories that are in common use and from which we are trying to extract something they do not contain. The idea that a student may obtain a thorough knowledge of History by the committing to memory of innumerable dates of victories and defeats on the battle-field; of the marches and countermarches of armed forces; of the edicts and measures promulgated or adopted by the Government, is erroneous, and the sooner it gives place to more wholesome opinions the better will it be for our schools.

Other conditions being equal, that History is best for a text book which contains the fewest dates. Many, nay *most*, of the Histories that have been compiled for use in our schools, may be considered mere chronologies that might answer for reference. These, the pupil is required to commit, or "get" in some manner, and which he more readily forgets than commits, and which if he does *not* forget, are of no possible use to him. More, it develops in the pupil such a repugnance for the study that it remains as a loathing for all forms of History forever after. Current Histories deal too much with battles and too little with the people. CARLYLE says: "The artist in History may be distinguished from the artisan in History. * * *

* * * Men who work mechanically in a department without eye for the

whole, not feeling that there is a whole; and men who inform and ennoble the humblest department with an idea of the whole, and habitually know that only in the whole is the partial to be truly discerned." Would that every writer of school History might ponder this distinction and profit thereby. for I regret to say that most of them are mere *artisans*. May they learn that the relation of causes to effects in History can not be understood from a table containing the dates of the principal events.

The question naturally arises, How can we best teach History with the means at our hands? The most thorough knowledge of History may only be had by the perusal and reperusal of the more elaborate works of our standard authors; but few have the volition to apply themselves to this kind of study in the right spirit. I think most of the readers of the SCHOOLMASTER will sustain me in the statement that the next best way is by reading a series of well-written biographies of the principal actors in that History. We all have a *penchant* for connected stories if they are written in an attractive manner, and when that story is truthful History the attraction is doubled. He who has read the lives of WASHINGTON, FRANKLIN, HAMILTON, ADAMS and HENRY, has a pretty correct knowledge of the causes which led to the Revolution, as well as of the Revolution itself. Now, if instead of the customary class-drill on History, the pupils were to occupy a half hour each day with the teacher in reading some attractive and standard biography like IRVING'S "Life of Washington," I think better results would follow. Indeed, by this method several important points are gained. Not only would the student be exercised in reading and learning History, but also making the acquaintance of different authors and acquiring a taste for literature. Whoever reads one of IRVING'S works will have a desire to read more of them, and the same can be said of many other authors who might be introduced in this way.

A plan was offered by a teacher, whom I lately met at an institute, for expediting this scheme, which I think so excellent that I can not refrain from giving it here. His plan was to have several districts or schools unite in purchasing works of the character described above, getting a sufficient number of copies of each work to meet the requirements of any school in the combination. Let all the copies of one work be sent to one of the schools to be used as long as needed, and then immediately exchanged for some other work which has meantime been used by one of the other schools. Thus, each work would make the circuit of all the schools. I can heartily endorse this admirable plan, and would willingly assist in executing it. I think upon fair trial it would commend itself to all, and doubt not but that it would prove fruitful of good results. I might add that it would be more prac-

licable in some of the Western States, where *system* has not been carried to an absurdity, than here in California. For here, in order to accomplish it, we should be obliged to deviate from the methods prescribed by the magnates at Sacramento, who are appointed to keep the "machine" wound up, and would thereby endanger our annual stipend.

The main aim of History in school, as I understand it, is to make more patriotic and intelligent citizens. To do this we, perhaps, can not commence too young. But we may render our efforts futile by commencing in a wrong manner. To accomplish our object, however, no plan should be left untried. But how our purpose is to be furthered by the memorizing of the fifteen dates on the page of a volume that is open before me, is more than I can comprehend.

JNO. M. EDDY.

TABLE BLUFF, CAL., August 7, 1876.

THE NAMES OF THE ORDERS.

What are the names of the fourth, fifth, seventh, eighth, etc., orders at the right of the decimal point?

In many institutes, and in a far greater number of teachers' classes, I have been surprised to find that the large proportion could not give them correctly. Such answers as "tens of thousandths," "hundreds of millionths," etc., were received. This fact must account for the appearance of this article.

A decimal system is one in which ten of any order make one of the next higher. Then one of any order equals one hundredth of one in the second higher; more than one in any order expresses tens of one in the next lower; more than one in any order expresses tenths of one in the next higher, hundredths of one in the second higher order, and so following.

Any figure standing in the first order at the right of the period, we say expresses some number of tenths of a unit, or, we may add, some number of tens of a hundredth, or hundredths of a ten, or hundreds of a thousandth, etc. So any figure standing in the second order at the right of the period expresses some number of a tenths of a tenth, or hundredths of a unit, or thousandths of a ten, or tens of a thousandth, or ten thousands of a millionth, etc. Then any figure in the fourth order at the right of the period expresses some number of hundredths of a hundredth, or hundreds of a millionth, or *tenths of a thousandth*, etc. How then can it express "tens of thousandths"? If what has been said is correct, where must a figure

stand to express "tens of thousandths"? "hundreds of thousandths"? "tenths of thousandths"? hundredths of thousandths"? If you are in doubt, look into any good "written arithmetic" and find the name of the fourth order. You find "ten-thousandths". What name has been given above to the same order? "Ten-thousandths," then, are what? Now, express in figures five hundreds of tenths; six tens of thousandths; six tenths of thousandths; six ten-thousandths.

Try the same experiment with hundreds of millionths; hundredths of millionths, hundred-millionths. Then don't say "tens of thousandths," "hundreds of thousandths," tens of millionths, etc., any more, if you have been accustomed to talk so in the past.

J.

FRIDAY AFTERNOON.

"When I came here, forty years ago, the Indians were walking all about where the city is now."

The old man leaned back in his chair, and closed his eyes as he mused on the many changes that time had wrought since the days of his youth. And I looked out at the broad streets, the handsome residences, and the fine stores, with throngs of people passing in and out, and thought how funny a stolid chieftain, in his shawl, would look among them; stately, solemn-looking churches stood where once was the Indian's hunting-ground. A few blocks away was the gray stone public school building, grave and earnest-looking as if it knew that on it depended the stability of our nation. On that very spot where now the future presidents and senators gather to spell c, a, t., and learn the boundaries of Illinois, the little Indian played, or chased the timid deer forty years ago. Poor little Indian! He never knew the blessing of the public school. How would he feel if he should revisit the scene of his youthful gambols, and see how the world has been moving on? I felt sorry for that little Indian.

The school-bell rang, and I started for the temple of learning. To be sure the March day had taken a fit of the sulks, and was weeping profusely, and her tears had formed medium-sized rivers in the streets, and the crossings were entirely submerged, but what of that? Was one whom Fate had deemed worthy to live in this marvelous age of civilization to be turned from his purpose by the perversity of a day? Perish the thought!

It was Friday afternoon, and the particular school that I had made up my mind to visit was the model school of the county, and muddy boots,

damp feet, and a possible doctor's bill should not swerve me in the least. It makes no difference of what county this school was the model. There are several counties in the state of Illinois, and a number of schools in each, and the probability is that it was Friday afternoon in all of them. The building was worthy to contain a model school. The High School room, besides being furnished with all the necessary conditions of successful work, was ornamented with handsome pictures, and contained a fine-toned organ. Surely, I thought, the students in this school, under the refining influence of beautiful sights and sweet sounds, and the instruction of teachers of whom I have heard much good, must have attained a rare degree of culture.

What a pity about that little Indian! He never knew the refined delight of throwing a paper wad across the room, with eyes intent on his book, and then making faces at little Indian No. 2, who stood in the corner to expiate No. 1's offence. He never had a Friday afternoon. But I tried to lay aside my regrets concerning him, and be thankful that we do have Friday afternoons.

The exercises began with a composition, during the reading of which I amused myself with a mental calculation of how many grammatical and rhetorical blunders a skillful essayist, under careful tuition, can contrive to insert into one sentence. Not being a profound mathematician, I had not arrived at a satisfactory result at the close of the reading. I didn't feel as sorry for that little Indian as I had felt.

Then a polite young man declaimed "Hohenlinden". I know he was polite, because he had a gentlemanly way of addressing people. Some folks, when they declaim "Hohenlinden," put on airs, and order Munich to wave her banners and charge with her chivalry. This young man didn't do so. He merely suggested, as mildly as possible, the propriety of waving the banners, and making a charge. It is possible that those banners might not have been waved vigorously, nor the charge made with a great degree of valor, under the influence of his remarks. Some people are not brought up to respect polite manners. But that's all the worse for them. Though his courtesy was exceedingly gratifying, it was not particularly inspiring, and I began to think that, maybe, the little Indian got along well enough.

Then a young lady read an essay, in which she informed us that there is no place like home, an opinion in which we fully agreed with her. There were other essays, declamations, and recitations, of the same high character, and then the critic's report by the principal, who blandly remarked that she had noticed very few things to criticize; she had observed a few mispronunciations of which she would speak. School was dismissed, and I departed

with a sigh of relief, and a vague impression that, perhaps, that little Indian had the best of it after all.

As I wended my way back through the mud, with not quite so much enthusiasm as had thrilled me a few hours before, I pondered the possible cause of my disappointment on my first visit to a model public school. Evidently it was not because of any mental defect of the pupils. They looked intelligent. If a problem in compound interest had been given them for solution, I presume they could have solved it. If you had asked them how many bones are in the body of a man, the answer probably would have been prompt and correct. Would it not have been as easy to teach them a few of the simple rules that ought to govern the use of their mother-tongue, as to impress upon their minds this scientific fact? If a nation is worth preserving, is not that which forms one of its chief characteristics, its language, a right to receive some attention?

On the black-boards in this school-room were some questions in Rhetoric; but they had nothing to do with the subject of Composition. They were placed there merely that the student might hunt out answers to them and get 10 in the teacher's class-book.

In the desks were text-books on the subject of Reading, but what of that? The Principal, a first-class teacher, with an experience of thirty years, and the unbounded confidence of the patrons of this marvelously successful school, had not the remotest idea that, practically, there is such a science as Rhetoric, or that the art of reading has any connection with the pupils of a public school.

Scholars have succeeded in introducing Latin into the High School course. The contest over German is still going on, and sometime in the not distant future, thoughtful educators will recognize German literature as so important a means of culture that in each High School we shall find the German teacher a necessary member of its corps of instructors.

Cannot some one who has influence to exert in the cause of education make a motion that English be taught in the public school?

MARY TORRENCE.

A story is going the rounds of a pedagogue out West who went before a School Board to be examined as to his qualifications for taking charge of the district school. The Board, among other questions, asked him his method of teaching geography. "Well," he replied, "some say the earth's round, other's say she's flat, according to the wishes of the parents."—*Albany Journal*.

STATE EXAMINATION.

(1876.)

ALGEBRA.

(Time, 90 Minutes.)

(Put all your work on the paper and make it explain itself. Results without the processes are nothing.)

1. Give, in simplest form, the value of each of the following expressions :

$$(a.) \sqrt[3]{\frac{9+16}{13-1}} \quad (b.) \sqrt[3]{9+16} \quad (c.) (5+3) \times 7 \quad (d.) 7-2(5-3).$$

$$(e.) 10 - \frac{13-1}{6}.$$

2. $17a - [13a + 7 - (3a - 4) - 1]$ is equal to what?

3. Compare geometry, arithmetic and algebra, and point out their fundamental differences.

4. State what is indicated by the exponent; by the co-efficient, and prove that $a^0 = 0a + 1$.

5. Give your rule for the solution of the general quadratic equation.

6. What is the sum of $8 + \sqrt[3]{75}$, and $3 - \sqrt[3]{48}$ and $4 + \sqrt[3]{27}$?

7. Render the denominator of the following fraction rational, without changing the value of the fraction, and reduce the result to its simplest form :

$$\frac{14a-6}{\sqrt[3]{7a+3}}$$

8. A man rents a certain number of acres of land for \$336. He cultivates 7 acres himself, and lets the remainder for \$4 an acre more than he pays for it. He receives for the portion he lets what he pays for the whole. Find the number of acres rented.

9. Given z equal to the sum of three quantities, of which the first is invariable, the second varies as x , and the third varies as x^2 . Also, when $x=1, 2, 3$; $y=6, 11, 18$, respectively; find z in terms of x .

10. Given $(x^6+1)y=(y^2+1)x^3$ and $(y^6+1)x=9(x^2+1)y^3$ to find x and y .

ORTHOGRAPHY.

(Time, 40 Minutes.)

1. Give four principal rules for spelling English words.

2. Correct the orthography of the following words and give the reason for each change: Billious, Supercede, Changeable, Phthisicy, Sudonym, Metalic, Brunet, Leperous, Hidrant, Camelleopard.

3. Write all the vowels and mark their different sounds by the characters used by Webster.

4. When are W and Y consonants? Illustrate.

5. Give two words in which P has the sound of B.

6. Write three words in which E is silent before D.

7. Write three words in which the prefix *en* or *in* may be used indifferently.

8. From what two languages are a majority of the English words, in present use derived?

9. Give rule and example for *t* when it has the sound of *sh*.

10. Indicate the accent and syllabication of the following words: Precisely, Circumstances, Interesting, Mountainous, Italic, Stupendous, Remedies.

READING.

(Time, 60 Minutes.)

1. How should the teaching of primary and advanced reading classes differ?

2. Point out three common defects in reading, and their remedies.

3. Define, (a.) Pitch. (b.) Anti-climax. (c.) Cadence.

4. Locate, name, and describe the organs that produce and modify the voice.

5. Name the qualities of the voice, and the thought and feeling usually expressed by each.

6. Define Elocution, and say to what extent it should be taught in the public schools.

7. Do children learn to read with good effect, unless they *hear* good reading?

8. Define slur, inflection, and expression.

9. Write a passage that should be read in monotone.

10. Read an exercise selected by the examiner.

ENGLISH GRAMMAR.

(Time, 60 Minutes.)

1. Write the principal parts of the following verbs: Sit, break, choose, fall, flee, fly, lie, (to recline) swear, tread, steal.

2. Parse the italicised words in the following: The oftener, *the* better. This word is used *like a noun*. The peasant is *as gay as* he. *We* being away, the work suffers.

3. Analyze the following:

There was a time when meadow, grove and stream,
The earth and every common sight,
To me did seem apparelled in celestial light,
The glory and the freshness of a dream.

4. Give five points of the argument either for or against specie as the basis of currency.

5. Name five cases in which the noun is independent.

6. Scan the following examples by marking the long and short syllables, thus—*u*. Give the names of the different feet.

(a) "Are but rounds up the ladder of God."

(b) "From birth to death, from death to birth,
From earth to heaven, from heaven to earth."

(c) "On the mountain tops appearing."

7. Give a general rule for the use of the comma.

8. Contrast pleonasm and ellipsis, and give an example of each.

9. Explain the difference between an idiom and a dialect of a language. Give an example of English idiom. Mention a dialect of the English language.

10. Write a list of auxiliary verbs in the English language. State for what purpose they are used, and illustrate by an example.

EDITORS' DEPARTMENT.

The following letter explains itself:

DEPARTMENT OF PUBLIC INSTRUCTION,
SPRINGFIELD, September 16, 1876. }

EDITOR SCHOOLMASTER:—Herewith I send you the report of the examinations for State certificates, held August 23, 24 and 25, which will be of some interest to the readers of the SCHOOLMASTER. The examination was at least thirty per cent. more difficult this year than last. The averages and minimum required were higher than before, and yet the per cent. of those that were successful is much larger than it was last year, as shown by the following table:

		1875.	
Sterling, Number examined.....	31	Number passed.....	3
Englewood, " "	6	" "	3
Normal, " "	23	" "	3
Springfield, " "	23	" "	4
Galesburg, " "	9	" "	5
Carbondale, " "	16	" "	4
Total examined.....	107	Total passed.....	20

1876.				
Dixon,	Number examined.....	24	Number passed.....	5
Champaign, "	"	17	"	2
Geneseo, "	"	5	"	4
Carbondale, "	"	8	"	4
Carthage, "	"	10	"	3
Total examined.....		64	Total passed	18

The following are the names and addresses of the successful candidates: John A. Holmes, Wenona; B. F. Hendricks, Sterling; M. H. Bermingham, Dunleith; J. L. Hartwell, Dixon; Agnes A. Gillis, Sterling; George L. Guy, Manchester; R. L. Barton, Cerro Gordo; Mrs. M. E. Watkins, Chicago; George Matheson, Wyoming; E. S. Martin, Kewanee, E. A. Allen, Annawan; John Washburn, Benton; George C. Ross, Carbondale; Samuel E. Harwood, Carbondale; C. H. Tatman, Centralia.

The work of this year shows a decided improvement over that of last, although the examination was more difficult and the standard required much higher.

It is my intention to make these tests as thorough as possible, believing that none are entitled to a certificate who are not eminently qualified to teach the several branches given in the list for examination. The intention is to make the questions fair, but searching, and demand the work required to be accurate.

I wish to express my sincere thanks to the several Boards of Examiners for the faithful manner in which they have performed the duties assigned to them.

Respectfully,

S. M. ETTER,

Superintendent Public Instruction.

Some three months since, Mr. A. C. COTTON, the recent principal of the Griggsville schools, accompanied by a friend, Mr. GEORGE A. ROWELL, of Grand Tower, started in their sail boat "The Venture" for a summer's cruise. They sailed up the Illinois to La Salle, and thence, by canal, to Chicago. Here they embarked upon the treacherous Michigan, and skirting the western shore, they leisurely pursued their way to Green Bay, touching here and there, exploring trout streams, and hunting deer and other game. They then passed through the straits and down to Thunder Bay. Loading their frail craft, only thirty inches deep, upon a steamer, they transported it to Niagara river, where they again pursued their journey to Ontario, sending the boat around the falls on a wagon. MR. COTTON has just returned from his trip, and is looking hale and hearty. They sailed a thousand miles, lived on the fat of the land, had a few stirring adventures, saw much

that was instructive, lived in the open air most of the time, and came back full of health and vigor, and all for a trifling expense. Here is the solution of the vacation question.

It seems that SULLIVAN'S lawyers have succeeded in having his trial postponed. It is the old story. Public indignation, it is supposed, will burn out by its own intensity, before the trial comes on, and only a nominal punishment will be inflicted. His counsel, it is said, confidently expect an acquittal. It may be that this is to be added to the long catalogue of unpunished crimes. It may be that the assassin will walk forth from his prison with the innocent blood upon his hands still crying for vengeance. Such scenes are not unusual. We are not prompted by vindictiveness as we write, but we do have a most profound conviction that retribution, swift and terrible, should follow such a crime. If government means anything it means security. If we cannot look to the authorities for that, it is well that we should understand it, that we may be prepared to secure for ourselves what tardy courts deny. Each man who dares to criticise public servants, whose conduct seems at least questionable, must put himself upon a war footing and be prepared for cowardly ruffians, such as this man SULLIVAN seems to have demonstrated himself. But we hope that our worst fears will not be realized. We hope for a fair and speedy trial, and, if the current story is correct, for a suitable vindication of the dignity of law.

The astonishing features of the Centennial Exhibition are not the quaint devices of Japan or China, nor the Greek or Roman antiquities. Nothing of that kind surprises us, for we are ready for anything that is out of the usual course of events. But when we find indications of high civilization, wealth, prosperity, all that we are accustomed to associate with ages of growth, in the exhibit of a country of which our fathers never heard in their school days, we confess to a considerable degree of genuine astonishment. The Australian department is one of the most instructive.

From a pamphlet—*New South Wales, Its Progress and Resources*—kindly furnished by the officials in charge, we are enabled to present a few facts respecting a portion of this wonderful country.

The Merino sheep wore the golden fleece that called the Argonauts of the nineteenth century Australia-ward, and one Captain MACARTHUR seems to have been the Jason.

New South Wales is in the south-eastern part of Australia, and is about six times the area of Illinois. In 1874 it had a population of over six hun-

dred thousand, and this is increasing at the rate of four per cent. annually. It has ten thousand miles of roads, upon which have been spent, in a single decade, seven and a half millions of dollars. It has four hundred and fifty miles of railroad, a post office in every township, and eight thousand miles of telegraph lines. Its newspapers publish yesterday's news from all over the world. It has a system of education established by the State, which includes itinerants, who visit families of settlers distant from villages. There is a university at Sidney, now in its twenty-sixth year.

In 1874 it had an import trade of a hundred dollars a head, and an export trade of about one hundred and eight, which is "double the import, and nearly quadruple the export trade of Great Britain." The harbors are excellent, and Sidney has a population of one hundred and sixty thousand.

Its wealth is chiefly pastoral, although it possesses vast quantities of the precious metals, has superior agricultural advantages, and is, in short, the poor man's opportunity.

The Centennial will do its greatest work in thus bringing the ends of the earth together, and pointing to countries new, where the poor may find cheap homes and escape the sad curse of poverty.

In the September number we alluded somewhat briefly to the Illinois Educational Exhibit, with the promise of something more this month.

There is material enough in the exhibit to fill a space twice as large as the one assigned. On account of the lack of room, the books are, necessarily, piled somewhat indiscriminately together, and one must do some digging to discover what there is. Nine counties sent ungraded district work. These were McLean, Peoria, Ogle, Adams, DeKalb, Henderson, Warren, St. Clair and Knox. (We quote from the catalogue of the exhibit.) Fifty-four towns and cities sent graded school work, and forty high schools and seminaries contributed volumes. Five Normal schools and five colleges are represented by bound volumes. The Industrial University exhibit, spoken of last month, is very large, and occupies almost as much space as the remainder of the Illinois exhibit. There is quite a quantity of miscellaneous work, aggregating more than a hundred volumes, with many unbound circulars, numerous photographs, plans, etc., and the Natural History exhibit.

The whole "get-up" of the material is simple and honest. The whole expense will be small. The room looks like a work shop, and not like an attempt at show. The agent, Mr. S. H. WHITE, will make a detailed report to the State Teachers' Association, at its next meeting. We hope to be able to present his paper in full.

Where is the State Association to be held? The time draws rapidly near. The prime qualification is a good hotel. No town lacking in this particular should apply. The social feature of the meeting is the most valuable one, and we should have a hotel sufficiently large to accommodate comfortably at least two hundred. There is little difficulty in getting audience rooms. Any good sized town has churches enough to supply the demand. But the hotel problem is a serious one, and we must look to towns of considerable size for that reason. The death of Mr. HANFORD leaves a vacancy in the committee. The other members are CHARLES I. PARKER, of the Oakland school, Chicago, and Dr. ROBERT ALLYN, of Carbondale.

Can we do anything for the cause *this* winter? The Legislature meets a week after our adjournment. They will do what we ask if they can see that it looks in the right direction. Can we not have an educational caucus, and, looking the situation calmly in the face, agree upon the reforms most needed, and then see that they are carried into effect? We stated in our last number what we conceived to be some of the needs. The topic deserves a full and informal discussion, and, then, concerted action.

The schools are again at their work. The coming man is cudgeling his brain over long division, or varying the monotony of his employment by an occasional discharge of paper wads at his next neighbor. The woman of the future, in short dress and pinafore, sits placidly discussing the galling despotism of the multiplication table. Hands, that are to move with unerring precision in obedience to the will of the artisan or artist, are clumsily fumbling over the simplest task. Brains that are to organize, and design, with tireless toil, are now weary with the uncertain effort of a few minutes. The teacher stands in the impressive presence of the future. He does not see the material taking final shape under his plastic touch. This feature of his work tests most rigidly his honesty and enthusiasm. In the West, where permanency is the exception, he feels, too often, that he toils but for a day. Each should labor with no thought that his effort is to be interrupted. Each grade is but a preparation for a higher. Labor is one factor, and time the other. One of these is under our control. The moral is simple. Let each in his allotted field, in his little day, do for the awkward hand and the untrained brain all that lies in his power, and trust the future for results.

The recent Orthographic Convention has attracted some attention from the press, but there has been no such spontaneous outburst of approval as the advocates of the so-called reform seem to have expected. According

to the *New England Journal of Education*, there was an attendance of about two hundred. Dr. HALDEMAN, the Professor of Comparative Philology in the University of Pennsylvania, presided, and Professor F. A. MARCH delivered the opening address.

The movement seems to be for the purpose of rendering the acquisition of English spelling somewhat easier for those whose opportunities for school training are necessarily limited. Every well-wisher of his kind, of course, desires that all unnecessary difficulties should be eliminated, but we question if the most hopeful reform will achieve results more remarkable than many of those who are to be benefited have already reached.

During a sojourn of a few weeks in Champaign county, it was our good fortune to visit Tolono, and inspect the township high school building located in that wide-awake village. It is situated in an enclosure of ample size, and is a neat, substantial edifice of brick. It has two good-sized rooms on the first floor, and a large assembly room and two recitation rooms above. It will accommodate two hundred and twenty-five, or more, very comfortably. It is supplied with two of the Pennell warmers, and is ventilated on the Ruttan system. It is a charming building, and everything about it indicates neatness and extreme care.

The principal, Mr. O. C. PALMER, is a gentleman of many years' experience in school work. He was educated at Dartmouth College, and brings to his position ripe scholarship, skill, enthusiasm, and *character*. He is a good type of the New Englander, and Tolono will see the effect of this phase of his character before he has been a dweller in their midst many years.

So the people of this village and township have at their doors an institution that will afford their sons and daughters a degree of culture which will fit them for positions of importance, but it will also give tone to the whole locality. It is the universal history of such institutions. With an established reputation as a school town, and this, it seems to us, it must gain soon, Tolono will call to it the best elements of the surrounding country.

The school is the fruit of Superintendent WILSON's energy and perseverance. His was the idea, and his the force that urged it to a successful issue. What he has done, others may imitate, and instead of having three or four such institutions, there may be hundreds, that will prove centers of culture and liberal ideas. The effect upon the lower grades will be incalculable. It would pay the whole bill for their support in the increased efficiency of the district schools.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

The long contest over appointments to the Board of Education is at length settled by the rejection of Messrs. RICHBERG, BLUTHARDT, OLESON, OLINGER and WILCE on the part of the City Council, and the appointment and confirmation of Messrs. HOTZ, PRUSSING, JACOBS, ARNOLD and Ex-Supt. WELLS. Without commenting on many phases of that contest there is no harm in saying that the old members died hard. They relinquished the insignia and authority of office with great reluctance. So far as can be learned, they are satisfied with their own record, and it would serve no good purpose to suggest here that in that matter they are, to all intents and purposes, solitary and alone. It is a matter for quiet congratulation that by their official demise one or two schemes, held in store for the schools of Chicago, have come to naught.

With regard to the new members, not much need be said. A great many people are satisfied with *any* change. Mr. PRUSSING has been, before, a member of the Board—an appointee of Ex-Mayor MEDILL. Messrs. HOTZ, JACOBS and ARNOLD have not heretofore been conspicuously connected with education. Mr. ARNOLD has been a member of Congress from this city. Mr. WELLS is a man eminently fit for the position, not only by superiority in the ordinary qualifications of ordinary men, but by his intimate knowledge of the needs of the schools, and the universal esteem in which he is held by all parties. We look for a great increase of harmony and sympathy between the Board, the patrons of the schools, and the teachers, through Mr. WELLS' influence. The new appointees are high-toned business and professional men, and are expected to do good work in the service of the schools.

A very complete idea of the organization and membership of the schools may be had from the following report of Assistant Supt. DOTY, submitted to the Board of Education at the close of the first week of the present term:

The schools opened Sept. 4, and at the close of last week the membership stood as follows:

PRIMARY DEPARTMENT.	
First grade.....	10,587
Second grade.....	8,030
Third grade.....	6,854
Fourth grade.....	4,546
Total.....	30,017
GRAMMAR DEPARTMENT.	
Fifth grade.....	2,768
Sixth grade.....	2,855
Seventh grade.....	1,452
Eighth grade.....	667
Total.....	7,342
HIGH SCHOOL.	
Ninth year.....	686
Tenth year.....	400
Eleventh year.....	61
Twelfth year.....	53
Normal class.....	180
Total.....	1,380
Whole number of scholars.....	38,559

Thirty-three half-day divisions were organized last week, and several more will have to be organized, as, in all probability, not less than 1,000 new pupils entered school Monday. Exclusive of principals, the average number of pupils to the teacher was 58 at the close of last week. The number of teachers in all the schools was 718.

The following is the Institute programme for the present year, so far as dates are concerned:

PRINCIPALS' ASSOCIATION.—Sept. 9th, Oct. 7th, Nov. 4th, Dec. 2d, Jan. 13th, Feb. 10th, March 10th, April 7th, May 11th, June 8th.

GRAMMAR GRADES.—Sept. 16th, Oct. 21st, Dec. 9th, Feb. 3d, March 17th, April 21st.

THIRD AND FOURTH GRADES.—Sept. 23d, Oct. 28th, Dec. 16th, Feb. 17th, March 24th, May 18th.

SECOND GRADE.—Sept. 30th, Nov. 11th, Jan. 20th, Feb. 24th, March 31st, May 25th.

FIRST GRADE.—Oct. 14th, Nov. 18th, Jan. 27th, March 3d, April 14th, June 1st.

It is perhaps safe to assume that the question of salaries is finally settled for the present year. Premising so much, and remembering that salaries so far as individual teachers are concerned are not, at the present writing, determined, our readers are, with some remorse, invited to classify their friends in Chicago according to the following report, which has been adopted:

Your committee on Salaries recommend that the salaries be graded in accordance with the recommendations of the accompanying communication.

GEO. C. CLARKE,
P. A. HOYNE,
Committee on Salaries.

The following is the communication referred to in the above Report:

To the Committee on Salaries:

Gentlemen:—The recent action of the Board touching salaries makes some further action necessary before the schools are opened, in order that teachers may know what their salaries are to be for the year.

The Schedule as adopted provides

For 200 teachers a salary of.....	\$650 each
For 100 " " ".....	575 "
For 100 " " ".....	525 "
For 100 " " ".....	475 "
For 60 " " ".....	425 "
For 60 " " ".....	375 "

Mr. Doty and myself have made a very thorough examination of the list of teachers elected, with their past salaries, and we find that the least changes will be made and the least harm will result from such an arrangement as the following:

Teachers having taught less than one year to receive the salary of.....	\$375
Between 1 and 3 years.....	425
" 3 " 3 ".....	475
" 3 " 4 ".....	525
" 4 " 7 ".....	575
All above 7 ".....	650

Providing that all teachers whose labors have been increased by doing away with floating teachers, and by the change from 48 to 60 pupils as the basis per teacher in the Grammar Department, shall receive the salary next above that to which they would be entitled under the above schedule; and provided further, that none shall receive a salary beyond \$650.

The salaries fixed at the beginning of the year to remain unchanged throughout the year, except in case of resignation or removal of a teacher, when the vacancy shall be filled from the list next below in salary; and all new appointees shall be entitled only to the lowest salary.

In determining the list to be made up, all teachers who, by reason of experience elsewhere, have been advanced in salary more rapidly than the regular course, shall be entitled to the advantage of one year in service by reason of such advancement.

The arrangement thus suggested will leave us very nearly as the order of the Board requires in number for each salary, and within the amount appropriated.

Since the Board has changed its rules regarding the time Principals shall be required to teach, it seems to us wiser to dispense with the distinction made in Principal's salaries of the first and second class, and equalize these two classes by giving to all of those two classes a salary of \$1,550 each.

Respectfully,

J. L. PICKARD,
Superintendent of Schools.
DUANE DOTY,
Assistant Superintendent.

The new Board of Education has held its first meeting and organized by the election of Hon. W. K. SULLIVAN, as President, and Prof. RODNEY WELCH, as Vice President. If the Editor in Politics has not yet become omnipotent, he may be said to be progressing finely in matters educational. MR. SULLIVAN is the city editor of the *Evening Journal*, and we are not quite certain whether Prof. WELCH is responsible for the Granger Literature of the *Weekly Times* or the Editorial Theology of *The Sunday Times*.

All the old officers of the Board were re-elected except Attorney GROGGIN, who gives place to one W. W. PERKINS.

The resolution to convert the principals of schools into retail booksellers, has after all created no intense commotion. Principals were entrusted at the opening of the schools with price lists showing the regular retail price of books used and were obligingly informed in an adjoining column what eighty per cent. of the same was. It was further intimated that if the principal saw that pupils got their books for this latter sum, their whole duty in the matter would be accomplished. Inasmuch as books have commonly been sold in the neighborhood of most of the schools by grocers, "candy men," etc., for about seventy-five per cent. of the regular retail rates, the book-trade has not yet been diverted from its regular channels, and there has not probably been a single book sold by any principal in the city.

At the meeting of the Principal's Association held Sept. 2d, 1876, Messrs. HOWLAND, BELFIELD, SLOCUM and BAKER, of the High Schools, were appointed a committee to prepare a suitable notice of Mr. HANFORD's death. A week later at the regular meeting of the Principals' Association, the following tribute to the memory of Mr. HANFORD was passed unanimously by a rising vote:

Passed from this life, Aug. 7, Francis A. HANFORD, Principal of North Division High-School. In this sad and startling event the Principals' Association deplore the loss of a kind and valued associate, an earnest and successful co-laborer, and a true and faithful friend. During his eight-years' connection with our schools, in positions of marked honor and responsibility, he had commended and endeared himself to us by his ardent and unselfish devotion to his work, his firm and unswerving integrity of purpose, and by his honest Christian manliness.

To his bereaved widow and orphaned children in their sorrow and desolation, we tender the assurance of our deepest and fullest sympathy.

EDUCATIONAL INTELLIGENCE.

Champaign Co.—DEAR SCHOOLMASTER:—The Normal School of this county closed its seventh annual session on Friday, Sept. 1st. The session was one of more than usual interest and profit, although, owing to the absence from the county of many of our teachers, the attendance was not so large as it has been for the past two years. The total enrollment was 227, but the average attendance was considerably less. The instruction was given by Prof. POWELL of Aurora, Cook of Normal, and PICKARD of the I. I. U., Champaign. Nothing was attempted outside of the "common branches," except Zoology. When we have become better prepared to teach *these*, then we expect to reach further out. All who attended this meeting went away feeling stronger to grapple with the difficulties of the school-room, and thankful to those who had spread the feast. The following resolutions were unanimously adopted amidst much enthusiasm.

WHEREAS, We, the members of Champaign County Normal School, feeling that we have been greatly benefited by this session of the normal, and desiring a continuance of the same work, and knowing that to Superintendent WILSON, above

all others, we are indebted for the success of this most pleasant session, do hereby adopt the following resolutions:

Resolved, That our sincere thanks are due and are hereby tendered to Supt. S. L. WILSON for his arduous and continued labors in organizing and conducting this school, for efforts to raise the standard of the Champaign county schools, and for his kind and impartial treatment of us all.

Resolved, That we hereby request the organization of a four weeks' normal session in 1877.

Resolved, That our thanks are due and are hereby tendered, to Prof. POWELL for his clear and concise lessons on, and his labors in explaining and analyzing, the English language and zoology; to Prof. COOK for his labors in teaching and explaining arithmetic, geography and constitutional history; to Prof. PICKARD for his lessons and practical work in reading.

Resolved, That we hereby request Superintendent WILSON to enter into such arrangements as will secure the services of the above-named gentlemen at our next normal session.

Resolved, That copies of these resolutions be sent to the city papers, and to the Illinois SCHOOLMASTER for publication. W.

Henderson Co.—Resolutions adopted at close of Institute:

1st. WHEREAS, all great national interests are secured by an aggregation of the units of effort; and whereas, we believe the interest of free schools and popular education more national than any other; therefore,

1st. *Resolved*, That we indorse the practice of assembling for consultation and instruction as an institute.

2d. *Resolved*, That what we are to teach is taught by text-books, and our ability evidenced by our record in school. How we are to teach is what we are to learn in institute.

3d. *Resolved*, That our grateful thanks are due and are hereby expressed to Rev. James McArthur for his efficient and faithful work as superintendent, and not less for his ability, zeal and success as President of this institute.

4th. *Resolved*, That we esteem classification as essential to discipline, and classification and discipline as essential to success in our work.

5th. *Resolved*, That we so amend our choice of reading text-books as to include Webb's Model 3d and 4th.

6th. *Resolved*, That we realize our obligation to Mr. JOHN CHAPIN and his associates, for excellent music; the Baptist society for the use of their church; Mr. COOPER for his address of welcome, and the people of Oquawka for kind interest and sympathy, and to all of these our honest thanks are tendered.

7th. *Resolved*, That the gratitude of the educational interests, and the thanks of this association, have been earned by those teachers who have responded in the fulfillment of the work assigned to them.

8th. *Resolved*, That in the death of our brother Mr. SILAS CATLIN, the fact of the brevity of life, and certainty of death, are again demonstrated, and we desire to express the double hope that he is now in the possession of his reward, and that we may be ready when the Master calls for us.

9th. *Resolved*, That we appreciate the fact that this is the Centennial year of American Independence; that we are grateful that it is ours to live and labor in this favored time; and realizing that before another century has passed our work will be done, and our reward bestowed by the great Teacher, this association sends greeting to the Henderson County Teachers' Institute of 1876.

SARAH E. CHAPIN,	} Committee.
CORA F. SIMPSON,	
CHARLES S. HARWOOD.	

Shelby County.—DEAR SCHOOLMASTER:—We began our Institute at Shelbyville, July 24, and held for five weeks. The attendance was more than double that of last year, the number at the close being 103.

Prof. McCORMICK, of the State Normal School, took charge of the Arithmetic, Geography, History and Botany. Mr. DE GARMO, of Naples, Ill., of the Grammar, Physiology, Reading and Zoology. The School Economy and Natural Philosophy were taught by myself. In a short time the pupils settled down to earnest work, and much permanent good was accomplished. Long before the time for closing came the old incrustations began to fall off, and the teachers awoke to the fact that for them, at least, there is something new under the sun; and not only new, but vastly superior to the flint-lock methods of our country ancestors.

At the close many complimentary resolutions were passed by the members of the school, and all went home feeling that they had become better, stronger teachers, and asking for another Institute next year.

JOHN STAPLETON.

Morgan County.—Below we give the resolutions of one of the most interesting Teachers' Drills ever held in Jacksonville, Ill., opening August 15, and closing August 26:

WHEREAS, our present Teachers' Drill is drawing to a close, and we, the teachers of Morgan county, believing the teacher's position first in importance and responsibility, and that all worthy aids and incentives should be recognized and used in the preparation and prosecution of our noble work, and that sociability and interchange of thought are to be considered among the elements of success, do recognize the means presented by this drill as highly conducive to these ends. Therefore,

Resolved, That we extend our hearty thanks to our worthy Superintendent and leader, Prof. HENRY HIGGINS, for his earnest and instructive labors in our behalf, and for the elevation of the profession, and for his great interest in our welfare and success as teachers, and for his special entertainment in Reading.

Resolved, That we extend our sincere thanks to Prof. J. M. RAGIN, who kindly gave us profitable and valuable instruction in English Grammar.

Resolved, That we tender our thanks to Rev. M. F. SHORT, for his lecture on Ultraism.

Resolved, That we acknowledge our great obligations to the county authorities for the use of the grand jury room.

Resolved, That we extend our thanks to WARD & BRO. for the use of books and apparatus during the session.

Resolved, That our thanks be extended to the Jacksonville *Journal*, and Illinois *Courier* for the publication of the proceedings of the Institute.

Resolved, That copies of these resolutions be presented to the Jacksonville *Journal*, Illinois *Courier*, and ILLINOIS SCHOOLMASTER for publication.

JENNIE M. MEEK,
ELLA F. HAYES, } Committee.
C. M. TUCKER.

Clay Co.—Our Institute closed on Friday, Aug. 25th, after a session of four weeks. The exercises were conducted by Profs. J. H. BROWNLEE of the Southern Normal, T. B. CRISP, T. B. BURLEY, and County Superintendent SMITH. The following resolutions were adopted at the close of the term:

WHEREAS, We, the teachers of Clay County, having devoted four weeks to institute work, and feeling that we have spent the time in a pleasant and profitable manner, hereby express our thanks and sentiments in the following resolutions:

Resolved, That we do pledge ourselves to labor earnestly in the cause of education, and that we will never relax our efforts until the schools of Clay County are second to none in the State, and we earnestly solicit the co-operation of parents and school officers.

Resolved, That we are opposed to lowering the standard of education by granting certificates to, or employment of, unqualified or unworthy teachers.

Resolved, That our County Superintendent has by the impartial discharge of his duty, won our confidence and esteem, and that we will sustain him in every effort to make our schools a success in every particular.

Resolved, That special thanks be tendered by this Institute to the Flora School Board for the use of their commodious new building; to Prof. JAS. H. BROWNLEE, of the Southern Ill. Normal, for his efficient work and untiring efforts in our behalf; to Profs. T. B. CRISP and T. B. BURLEY for valuable assistance during the Institute; to Miss FRANKIE PRESLEY for the use of her organ and her elegant music, to the citizens of Flora for favors, and to the M. E. Church for the use of their music books.

W. W. BOWLER,
N. H. LEE,
A. F. SHINN. } *Committee.*

NORTH DIXON, Sept. 11, 1876.

Lee Co.—DEAR SCHOOLMASTER:—We are most of us well in the harness for the new year, and have done one week's work. The educational outlook in Lee county is in many ways encouraging. The standard of qualifications required by our County Superintendent is higher than has probably ever been demanded before.

There is a pretty universal call for broader and more thorough culture among teachers, and I am happy to say that the supply of real worthy teachers is gradually increasing. Our board has determined to employ no teachers but those with first grade certificates.

In a few instances economical (?) boards are calling for "cheap teachers." I believe they usually succeed in getting them. Why is it that men will not learn that if they would have a "good article" of teaching, they must pay a fair price for it, as well as for other things which are upon the market?

The summer institute, conducted in this city by Profs. H. H. and E. C. SMITH, closed four weeks ago. Although the attendance was much smaller than was expected, (about thirty), the work done and the spirit manifested were good. It closed with an examination for State certificates, in which from twenty-five to thirty participated.

A number of years ago there was erected, in the east part of town, a large and beautiful edifice. Owing to bad management, financial and otherwise, the school which was established in it did not succeed, and the building was finally abandoned. Subsequently similar attempts have been made with similar results. Last year there was organized and duly established in this building, what was called Rock River University. Many feared that this institution would meet a fate like that of its predecessors, but such, we are glad to say, has not been the case. Its catalogue, issued this summer, shows that instruction was given in its various departments to about 150 pupils. The managers are much encouraged by the success of the past, and the prospective attendance of the present year. The art, commercial, classical, and other departments, are conducted by teachers, trained for their special work. In natural advantages for such an institution, Dixon has not a rival in the west. The fall term commences to-day.

J. L. HARTWELL.

The summer session of the Northern Illinois Normal closed with a reception on Friday evening, August 18th, 1876. The spacious parlors of the Rock River University were completely filled with the members and invited friends. The entertainment consisted of music, vocal and instrumental, select readings, etc., etc. Short addresses were delivered by Prof. E. C. SMITH, Rev. Dr. TOOKE, and DANIEL CAREY, County Supt. School. The evening passed off very pleasantly to all, and the recollections of its many pleasures, and the kind and encouraging words of the speakers, will long be cherished as one of the pleasant green spots in the history of each member. The following preamble and resolutions were unanimously adopted, viz:

WHEREAS, we, the members of the Northern Ill., Normal, which has been in session for the past six weeks at the Rock River University, in the city of Dixon, now affirm by experience that teachers' institutes held during the summer vacation, in July and August, when practical teachers can attend, and conducted by experienced educators, are invaluable auxiliaries in promoting the efficiency of pub-

lic school instruction, and in awakening the interest of the people in regard to their duty to thoroughly educate the masses; therefore be it

Resolved, That our thanks are justly due, and are hereby tendered to Profs. H. H. SMITH, E. C. SMITH, and their assistants, for their arduous labors and efficient instruction.

Resolved, That the Rock River University, by its well furnished tables, its commodious rooms and beautiful grounds, has contributed largely to our comfort and pleasure during the session, and tendering our thanks for the same we trust that Providence will favor us with an equally pleasant and profitable session next year.

Resolved, That our thanks are hereby tendered to Prof. F. S. SMITH, Prof. S. W. MOSES and wife, Miss L. M. OLNEY and others for their excellent music gratuitously rendered at our several entertainments.

Resolved, That we extend our hearty thanks to Dr. J. M. GREGORY for his very interesting and useful lecture.

Resolved, That it is our opinion that the State should establish, at least, three Normal Institutes at suitable places within its limits to be held during the months of July and August of each year for the thorough drill of practical teachers, and that it should defray all the necessary expenses of instruction.

Resolved, That our sincere thanks are herein tendered to the Chicago & Northwestern R. R. Co. for reduced rates of fare.

Resolved, That a copy of these resolutions be sent to the city papers and to the ILLINOIS SCHOOLMASTER for publication.

T. W. FORD, }
ADELE HESS, } Committee.
S. P. BROOKS, }

Mason County.—Resolutions of the Teachers' Institute:

Resolved, That we, the members of Mason County Institute, return thanks to our Superintendent, S. M. BADGER, and Prof. WILLIAMSON, his co-operator, for their untiring zeal and patience in preparing us for our future work. As Superintendent, Mr. BADGER has done his work as few others would. He has visited our schools more often than any previous Superintendent, and often in foul weather, and when he was not in very good health, we have opened the school-room door to admit him, who always had advice to cheer and aid the sometimes almost discouraged teachers. If praise was due it always was given as if it came from the heart. If reproach was necessary it was given as advice. The teachers are indebted to him as a friend, tried and trusted. We offer him our best wishes, and hope he may long remain in his present office. And to Prof. WILLIAMSON we express our gratitude for his most valuable services; also for the series of interesting lectures he delivered for our especial benefit, which have made a deep impression on the minds of his listeners. His departure from this county is deeply regretted. We hope he will find his new field of labor a pleasant one.

Resolved, That we return thanks to the editors of Mason City papers for their kindness in helping forward the educational work of the county.

Resolved, That we give thanks to the school board for the use of the building during this session. It is one of the most pleasant that can be found.

Resolved, That we also offer thanks to our friends in Mason City for the benevolent manner in which they received and treated us. May their lives be prosperous and long—even until the next Centennial.

Resolved, That a copy of these resolutions be presented for publication to the papers of this city and to the ILLINOIS SCHOOLMASTER.

L. A. REED, Chairman.

MARY J. CALAHAN, }
NETTIE BISHOP, } Committee.
ASBURY MILLER, }

To Daviess County.—The County Institute held a session in the High School building, at Galena, continuing from August 22d to September 1st. About 120 teachers were in attendance. Much of the instruction was given by the teachers of

the county, especially S. HAYS, of the High school, B. F. MERTEN, of the Normal school, Prof. ZIMMERMAN, formerly of the Normal school, M. BIRMINGHAM, JOHN MCHUGH, and Miss JOSIE MCHUGH. Prof. A. A. GRIFFITH, of Freeport, gave instruction in elocution during the entire session; and Prof. HEWETT, of the State Normal, assisted during the second week. On the last three evenings meetings were held in Turner Hall; the exercises each evening consisted of a short lecture by Prof. HEWETT, and readings by Prof. GRIFFITH.

The resolutions express the usual thanks to such as instructed or aided in the Institute and to the County Superintendent. They also express a strong belief in the value of Institutes, together with an opinion that they should be provided by State law.

One of the county papers pays the following compliment to Superintendent BRAND, in which we heartily concur:

We must not fail to notice the untiring efforts of our County Superintendent of Schools, in making the Teachers' Institute a success, and a source of information to the teachers and citizens of Jo Daviess county; also in procuring some of the best professors of education in the State, to instruct the teachers in the way to educate the rising generation in the principles of a free and independent government.

Moultrie Co.—Resolutions adopted at the close of the Institute:

WHEREAS, An expression of thanks of the students of Moultrie county Normal is due our worthy teachers, for their earnest and faithful labors in our behalf; therefore, be it

Resolved, That we extend to Prof. BOLTWOOD our sincere thanks for his many lessons of moral and intellectual instructions, which we trust will ennoble our lives, and make us more worthy of our profession; that in leaving us he takes with him our lasting respect and gratitude; our best wishes for his future happiness and success.

Resolved, That a like expression of thanks and good wishes be extended to our other teachers Prof. ROSE and Mrs. E. J. BASTION.

Mr. JAMES SEDGEWICK,	} <i>Committee.</i>
" THEODORE HANEY,	
" M. R. CASS,	
" D. BAGGETT,	
Miss ALICE L. PORTER,	
" LUCRETIA HARBAUGH,	

Logan Co.—The Logan County Normal Institute closed a very pleasant and successful session of four weeks on Friday, August 11. Prof. J. G. CHALFANT, County Superintendent, Prof. GEORGE J. TURNER of Atlanta, J. R. BARNETT of Latham, and C. L. HATFIELD of Lincoln, were the instructors. The branches taught were Orthography, Reading, Grammar, Arithmetic, Geography, Physiology, Natural Philosophy, Natural History, Physical Geography and Botany, and drill and instruction of the most thorough kind were given to all.

The enrollment numbered eighty, comprising the best teachers of Logan and many from other counties. The liveliest interest was manifested throughout the duration of the Institute. During the session, two lectures were delivered under the auspices of the Institute; one by Dr. J. A. SEWALL, of Normal, and one by Dr. W. H. H. ADAMS, of Bloomington. Both lectures were practical, interesting and well attended.

At the close of the session, resolutions were adopted thanking various individuals and Boards of Trustees for services, use of buildings, etc. The following are a part:

"As we have now arrived at the close of the present interesting and profitable session of our Institute, we deem it fitting to recognize in a public manner the obligations under which we are placed for various kind services. Therefore, be it

Resolved, That we cordially acknowledge our indebtedness to Profs. CHALFANT and TURNER, and the other instructors, for their efforts in behalf of the Institute;

we being aware of the fact that to their excellent management and thorough methods of instruction is owing, in a very great degree, the lively interest that has been manifested throughout the term; and especially would we commend the untiring labors of Prof. CHALFANT, to whom we, as teachers of the county, are indebted for very much that tends to make our work more pleasant, efficient and profitable.

Resolved, That we will endeavor to profit by the instruction we have received, and by our communion and interchange of thought; and that we will go forth to our work with a determination to do our best; and will strive to educate not only the head but the heart as well, to the end that our vocation may become nobler and more useful, and that our labor may rebound more abundantly to the good of man and the glory of God."

A club of twenty-eight subscribers to the SCHOOLMASTER was secured during the week.

A sociable was held in Good Templars' Hall on the final Friday evening. Toasts, short speeches, music, promenading, ice cream, etc., etc. Nothing more need be said to convey the impression that the close was enjoyed as well as the beginning.

J. W. G.

ILLINOIS NORMAL.

On the 4th of September, the present school year opened. At this time, three weeks after the beginning, the numbers enrolled are as follows: 258 in the Normal Department; 59 in the High School; 60 in the Grammar School, and 36 in the Primary room; total in the university, 413. This number is not so great as our numbers have been in some previous years, but it is about the same as last fall. There will be some further increase.

The work of the year has opened very pleasantly; there is only one serious drawback at present; many of the pupils are not in good health. Ague and tendency to fevers are quite too prevalent for the most efficient work. Several have been so seriously ill as to oblige them to return home.

The little Primary school is attracting a good deal of attention; a new class, numbering fifteen, all under seven years old, has been received; and Miss PADDOCK is showing her skill in aiding the young idea to shoot, in its early stages.

The Societies have begun their work with the thought of the coming contest to goad them on to their best efforts. Mr. W. C. GLIDDEN is President of the Philadelphian, and Miss AGNES E. BALL, of the Wrightonian. The halls present a very neat and tasteful appearance, the result of the work done on them last year.

Most of the teachers visited the Centennial during the summer; but all are now back at their work, and in good health, except Prof. McCORMICK. He has been confined to his house for two weeks, but is better now.

CHARLIE DE GARMO is glad; it is a boy about ten days old.

DAVID S. ELLIOTT was married a few days since, in Caseyville.

C. B. KINYON is going to be a doctor; he has entered the Medical school at Ann Arbor.

CHARLES McMURRY has entered the Freshman class of Michigan University.

LURA M. BULLOCK is in school pursuing a post-graduate course in Language.

Prof. COOK has assumed the duties of Professor of Mathematics.

Prof. McCORMICK takes History, in addition to Geography, on his capacious shoulders.

Prof. STETSON, assisted by Miss EDWARDS, has direction of the Reading.

Miss CASE is devoting her time chiefly to the classes in Grammar.

These changes in the teachers' duties are in consequence of the action of the Board of Education, at their last meeting.

PERSONAL.

Miss EMILY COTTON, a teacher, for several years at Decatur, and more recently at Collinsville, was married on the 28th of September, to a Mr. COLLINS, of Quincy.

R. L. BARTON remains at Mound City another year

L. C. DOUGHERTY is progressing finely, as Principal of Lacon schools.

O. M. MCPHERSON is studying law in the Iowa University.

JAMES P. SLADE, Superintendent of St. Clair County, was recently married to Miss ELLA BOWMAN, of Belleville. THE SCHOOLMASTER wishes them abundant happiness.

DAVID T. STEWART is Principal of the school in Palestine, Crawford Co., Ill.

THOMAS S. MOORE has the second department with Mr. STEWART.

WILLIAM H. CHAMBERLIN is Principal of the school at Ridge Farm, Vermillion county.

BOOK TABLE.*Course of Study in the Aurora Public Schools.*

Mr. POWELL, the superintendent of schools in East Aurora, published some years since, in THE SCHOOLMASTER, a series of Language Lessons. It is thought that these were the pioneer articles in this kind of work. They attracted much attention, and encountered some adverse criticism. That he struck the true idea in teaching language is evidenced by the large and constantly increasing crop of "Language Lessons."

The report contains about 300 pp., and is a full presentation of the Aurora course. The volume is unique. "Rules of the Board," "Examination Questions," and kindred material, do not cumber its pages, but, instead, a "Reading Course," carefully outlined; a "Language Course," beginning with the first day in school, and extending through the high-school course; a similar course in "Number" through arithmetic; a systematic course in Geography, in History, in Plants, Animals, Human Body, and in Form.

The appendix occupies 25 pp., and presents plans of work. The book is more than a course of study; it is a manual of instruction, suitable for the wants of a training class, or of any student of matter and methods for schools.

By permission of Mr. POWELL, we shall present in our pages, from time to time, some of the work, so that our readers may obtain a better idea than any limited review could give.

We have the following points to make respecting the work:

1. It is not an oral course. It is thought that pupils will make more use of books than by the ordinary methods.

2. The same plan is followed through the entire course. There is no break in the work. It is closely joined throughout, consequently everything looks to definite results ahead. Needless repetitions are avoided.

3. The work is arranged with the thought that the pupils should learn first what they most need to know. If they leave school at any time, they take with them what is most suitable to their stage of development.

4. The work is also arranged in accordance with the most approved modern ideas of teaching. The idea of proceeding from the known to the unknown, and of giving nothing which involves processes of which the pupils have not yet even heard, is kept constantly in view.

5. Not only do the parts of each course "hinge," but the parallel courses are arranged with reference to each other. The lines of inter-connection are numerous, and each course reacts upon the others.

Some publishing house may strike a "Bonanza" by enlisting Mr. Powell in the task of book-making.

The author accords praise to Mr. Clark, his accomplished high-school principal, to Miss Todd, his training teacher, and to others of his co-workers, for valuable assistance.

Harper's School Geography. New York: HARPER & BROTHERS, pp. 124. large quarto; price, \$1.80.

We have here a new text-book, beautifully made, richly illustrated, both with maps and pictures, containing most of the excellences of those that have preceded it, as well as several important features that are peculiar to it.

The leading purpose of the writer, as he tells us, is to present geography in its commercial aspects; but he has by no means confined himself to this, nor neglected other departments of the study. He very properly makes Physical Geography the basis of all the rest; and there is enough of Physical Geography in this book to serve for the use of all our common and grammar schools. But, Political and Descriptive Geography are by no means neglected. And in the department of Descriptive Geography, there are several excellent features, although all of them are not peculiar to this book. We commend the study of the United States by sections, the full illustrations showing the animals of the several continents, and the peculiarity of introducing several pages of *special geography* of the more important States, to be inserted in editions designed for use in those States.

Naturally, we have been gratified to notice several things which we have not often found in other text-books, but which we have learned to regard as important, from long experience in teaching this subject. Among these, we may mention the remarks about map-drawing, and the broad distinction between *sketches* and *maps*, on p. 7., the comparisons of North and South America, p. 75, and the indication of the more important places whose location is to be specially impressed on the memory, as on nearly or quite all the political maps; we may also add the tracing of the great railroad routes, as shown on pp. 66 and 67.

Of course, we cannot be certain that use in the school-room would confirm all the favorable impressions that a somewhat careful examination of the book has given us; but we are very free to confess that those impressions are almost entirely favorable. This book is a series in itself; no other book on geography is necessary in most of our schools, except a good primary book,—that most difficult of all books to find. The selection of topics appears to be very judicious, and the language clear and concise,—the illustrations are numerous, lively and instructive, the maps clear and beautiful. We would qualify the last statement only, by suggesting that on some of the maps the engraving of the mountains can be improved.

We notice little to criticise adversely. But we do protest against the definition of a circle, on p. 3. even when qualified by the note in the margin. On p. 16 we are told that heat produces ascending currents of air, and "other air flows in below to fill the space." Will our school-books never have done "putting the cart before the horse" in this statement? The Pronouncing Vocabulary is too meager. On the whole, we are quite sure that Harpers' Geography will prove a formidable rival to the school geographies already in the field.

Bartholomew's National System of Industrial Drawing. Free Hand. POTTER, AINSWORTH & Co., New York and Chicago.

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In the limited space of a brief review, it is impossible to give any adequate idea of the comprehensiveness of the plan of the author, but enough has perhaps been said to indicate that definite results in the arts are aimed at, while giving the training that this study furnishes to eye and hand.

The western agent of the publishers is J. J. DINSMORE, 25 Washington street, Chicago.

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ILLINOIS TEACHER, }
Volume XXII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

NOVEMBER, 1876.

NUMBER 102.

THE COUNTRY SCHOOL.

The second reader division of section D should be required to take three studies—say, reading, mental arithmetic and spelling, in each of which there should be a certain amount of work mapped out for the term.

As the first reader class was required to print the letters and words, so the second reader class should be taught to write in script all the printed matter in the text-book. The sounds of the letters should here be taught, and spelling all the words by letter and by sound should be faithfully practiced. A good method of teaching the script letters is to print a word on the board, and just above write it plainly and neatly. Point to the written word, and as soon as the class have learned the script letters, erase the printed word and drill again, using the same letters in other words. Write a copy of the letters learned, either on the board where the whole class can see it, or on each member's slate, and let the practice of making these be part of the work of the class till next recitation. Keep up a constant review, so that all learned may be retained. Vary the work of the class between recitations by allowing them to write on the board sometimes, as well as on the slate.

In the oral work, insist on distinct utterance, giving to each letter its appropriate sound.

Don't forget that to make a ready reader the child must read much, and as the time is so short, both teacher and class should be strictly prompt.

With the mental arithmetic "make haste slowly." Be sure that all your class can count to 100 readily. Then teach them to count 100 increasing two each time: 0 (nothing), 2, 4, 6, 8, 10, etc. Then 1, 3, 5, 7, 9, etc. Use objects to illustrate. As they grow stronger let them count adding three each time, then four, then five, always beginning with 0 (nothing).

If the interest flags, arouse it by some such means as follows: Arrange a table of the above figures written in columns, standing side by side, thus:

0	1	Call this the "Table of Two." The children are delighted to see that the numbers read regularly back and forth, beginning, 0, (nothing) 1, 2, 3, &c. Arrange tables for the other numbers in a similar manner, being always sure that all see and understand before taking a new step. As they advance in the text-book require them to write the tables, as well as to recite them orally.
2	3	
4	5	
6	7	
8	9	
10	11	

&c.

The work in spelling, also, should be made interesting by variation.

Be patient with the phlegmatic ones who seem invulnerable to your magnetism.

Let section C take four studies for the term—say, reading, spelling, mental arithmetic (not but what all arithmetic is mental), and geography.

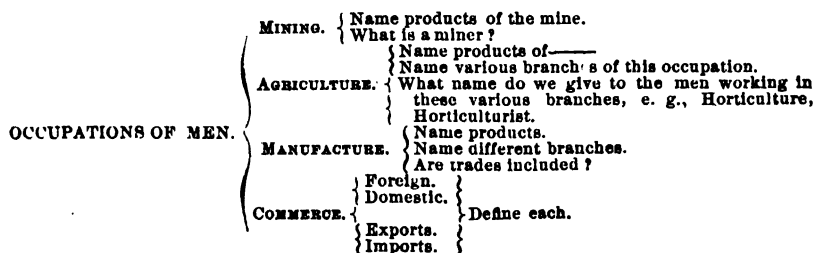
As reading and spelling form the foundation of all learning, so there should be the utmost care taken in this part of the children's early instruction, the greatest amount of pains and perseverance on the part of both scholars and instructor being deemed not too much.

This class should be made familiar with the various marks of punctuation, multiplied examples being given, from time to time, to illustrate each. The meaning of the words of the text, and the effects of emphasis, inflection, etc., upon the meaning, should receive thorough attention, as well as correct pronunciation of all words, and an intelligent use of the dictionary.

In spelling, this class should be led a little deeper into orthography, and a free use of the dictionary should be encouraged—urged if need be.

In mental arithmetic, teach much by association, and increase the work as the mental strength of the scholar increases.

In geography, the correct spelling and pronunciation of all proper names should be persistently practiced. It may be found advantageous to do much of the reviewing by diagram, for example:



The children will take great delight in this work, and should be encouraged to do it neatly.

A list of questions to the point should be made out for each diagram—questions that will lead to, and show up, any defect in the diagram, e. g. Why do men have occupations? And so the teacher may lead his class to discover what is left out, and any simple discovery of that kind is sure to animate a class.

Let the motto ever be “Onward and Upward.”

Section B should devote one term of thorough work to the 4th reader. Spelling should be one of the other three branches for the term. Either intellectual arithmetic or geography, and language, according to Swinton or Green, should be the other two.

Those methods of conducting the recitations in reading and spelling should be adopted, that will occasion the greatest amount of dictionary, gazetteer, and cyclopedia work.

The work in geography and arithmetic in this class will be similar to that in the C class, only in a more advanced stage—the scholars are stronger.

As custom and not law regulates some of the schools, many of them in fact, it is useless to speak of the A section as taking certain studies.

In most schools the older scholars seldom consult the teacher as to what they should study, but rather dictate as to what he shall teach them. And when received in the right light there seems a little reason for this. These scholars are, many of them, nearly ready to leave school, and as they have so little time in the school on account of age, not because they are mentally ready, they feel that there are certain things they should like to devote the time to.

The teacher, meeting such a trouble as this, should consult the directors, and make it a point to win them to his views in favor of grading the school. Then he should talk candidly with the scholars, and show them the mistake they make in trying to take too many studies at one time.

In nine cases out of ten the teacher will find all parties concerned quite ready to grade the schools. When this is done, it is not difficult to assign satisfactory studies and go on with the work.

It should be the constant effort of the teacher to teach the scholars, one and all, self-reliance.

I have known scholars from 12 to 18 years old, who, having solved an example, and found the correct result, would not be positive enough to defend themselves if the correctness of the work was questioned.

A young lady, who had “been through common and decimal fractions,”

was asked how much her father's hogs came to, there being 24,569 pounds, at 6½ cents per pound. She could not tell, "because she did not know when she had the right answer."

Now, fellow-teachers, what is wrong? for the above is not merely a fancy picture, but a single example, illustrating the kind of work done in many of the schools. The one end sought for seems to be to get "through the book."

Teach the children self-reliance. Let your life be such, fellow-teachers, that you may constantly teach, by practice, purity of purpose, truthfulness, manly politeness, and womanly modesty, neatness, punctuality, industry, thoroughness, regard for the right, reverence for the aged, respect for all, love of the good and the true and the beautiful, and a general faith in mankind. Be patient with the dull ones, and kind but firm with all.

It is to be hoped that some action will be taken during this winter's session of the Legislature, looking towards the encouragement of a plan whereby uniform work, in the country schools, may be secured.

J. W. WRIGHT.

SHORT SERMONS FROM FAMILIAR TEXTS.—III.

For I say to every man that is among you, not to think of himself more highly than he ought to think; but to think soberly. Rom.—XII; 3.

Probably no class of people are more likely to become self-opinionated, and self-important, than teachers. Coming, as they do, daily, into relations with minds immature and undisciplined, it is not strange, if in time, they get to thinking of themselves more highly than they ought to think. Judgments are formed by contrasting things, as well as by comparing them. We speak of the elephant as large, and of the ant as small; but were the elephant, though of the present size, the smallest animal we ever saw, or the ant the largest, we should then think of the one as the little elephant, or of the other as the great ant. Being placed as we are, so much in the society of the young and inexperienced, we are apt to regard them as representatives of the world, and ourselves as a superior class. From this inclination so frequently represented arose the fact that persons who were extravagant in their opinions of themselves were called *pedants*. James I, of England, conducted himself so much like the schoolmaster of his day, that he was called *pedantic*.

The teacher should spend a good part of his leisure time in the society of the cultured of other trades and professions.

We sometimes hear it said of a stranger, "I know he is a teacher, for he talks all the while as if he were in the presence of children, whose minds he is called upon to enlighten."

Let us so conduct ourselves, teachers, that strangers may think of us only as ladies and gentlemen. C.

LANGUAGE.

THE PLURAL OF NOUNS—GENERAL LAW.

Lead pupils

1. To give nouns denoting one ;
2. To change them so that they will denote more than one ;
3. To state the different uses of the two forms ;
4. To note the difference in the sounds of the two words ;
5. To find on the printed page the manner of representing this difference ;
6. To name and define each form ;
7. To state and write the law for writing the plural form ;
8. TO PRACTICE.

THE PLURAL FORMS OF NOUNS—SPECIAL LAW NUMBER ONE.

Let pupils spell words in both forms, both by sounds and by letters : let them state the exact difference in each case.

Pronounce a word ending, in the singular, with one of the sounds represented by *s*, *z*, *sh*, *zh*, *ch* (as in church), or *j*, and let the pupils

1. Pronounce it ;
2. Change it, so that it shall denote more than one ;
3. Spell both words by sounds ;
4. State the difference between the sounds of the two words ;
5. Discover that the difference involves an extra impulse of the voice (syllable) ;
6. Discover, by giving the sounds of the words, why an additional syllable is necessary ;
7. Determine, without reference, how to represent that difference.

In a similar manner, let pupils dispose of many words ending in sounds *a* above, after which let them

1. Give law just learned and associate it with that previously learned ;
2. Practice by writing sentences in which these words occur in both forms.

—Aurora Course.

A THING MUCH DESIRED.

In all co-operative work, almost the first essential thing is to seek a common end by the same means. St. Paul found this so necessary, that he instructs the early Christian converts to "walk by the same rule and mind the same things." While this text has been quoted in justification of uniformity of creed and worship enforced by law, and in consequence may have wrought mischievously in all ages, it is, nevertheless, a precept wholesome and philosophical. Yet to insist on too great uniformity, may, in some cases, be very tedious and injurious. A company of soldiers will march better, and with less fatigue, if they keep step, but if they attempt to pass a bridge in that way, it will swing so as to impede their march, and may break under the weight of the accumulated force of their tread. And when the march is long, broken columns will give refreshment for at least a little while. But if they do not keep time at all, they soon become a mob, and are not only powerless, but grow to be a nuisance. So men, each aiming to accomplish a common good, or each to secure a given result, must work by the same rule and know or attend to the same things.

Such a thought shows the necessity of having a system for all our common school work. Indeed, we call our Public Education, and are proud to name it thus, a system. Whether that word does not express a far distant hope rather than an accomplished fact will not be here discussed. It ought to be a system, and so we assume that it is. It is, however, a system which aims to bring several millions of growing minds to a maturity of strength, an accuracy of discipline, a power of thinking, a purity and completeness of moral character, and an accumulation of knowledge, as nearly perfect as human nature can attain. And, further, this one desired result is to be reached by the labors of several hundred thousand minds of teachers who use various appliances adapted to secure that end. School officers, and even parents, are not to be excluded in the enumeration of persons laboring to effect this grand common purpose. There must then be a system by which all shall work. And this system ought to include, at least, an answer to the following questions, viz :

What studies? What thought-exercises? What word-processes? What mental stimulants? What moral disciplines? What physical labors? At what times, and By what methods? and, At what ages are these to be commenced, and At what times are they to be completed? A perfect

system, or even an imperfect one, would certainly seek to give an answer to most, at least, of these lawful inquiries. We say we have a system of Public Schools, or Education. Does it answer these questions? Can we select at random, in our State, a boy or a girl, of a given age, and tell at once how much knowledge he ought to have? Can we even guess how much of letter-writing, or book-keeping, or computing accounts, or accurate conversation he is capable of? But if our public school children were educated systematically, would not an answer, within certain narrowly variable limits, be possible?

This is a matter which might very easily lead to practical results. In our State of Illinois we have, let us suppose, one hundred thousand children of the age of ten years, or of any other year, during the school period. Did each one of these know the same things as the others, or had he been taught the same things by the same rule, how easy would it be to grade him in another school than the one in which he had been trained. This is really done in our cities, where children are readily transferred from one ward to another, when their parents change abodes. Can it be done with any profit where children are carried from one town, or city, or county, to another? Is it possible to boast much, with justice, about our school system till this can be done?

The purpose of this writing is to inquire why our State Teachers' Association in connection with the Superintendent of Public Instruction might not attempt a solution of this very perplexing problem,—a thing so much to be desired. Its last meeting did indeed take a step in this direction. A committee was chosen to arrange a course of study for High Schools and Colleges, so as to harmonize their work. But why not go further and harmonize our whole school work from the bottom to the top,—in all the cities, and towns, and counties, in all schools and colleges, and Normal Schools? The love of individual freedom and of personal preferences is fully known, and the obstacles are known to be many; but it is firmly believed that both, when seen to be greatest, are not insurmountable. Why may not our wise men devote attention to this matter? A CONFESSED OFFENDER.

A GOOD IDEA.

I read in one of the metropolitan journals, recently, an editorial on the schools of Chicago, that pleased me considerably. If the said article had been more radical and thus had struck at the root of the matter, I should have rejoiced exceedingly, and grumbled not.

However, the idea expressed is sound, logical, and ought to be promulgated throughout the length and breadth of the land, wherever the nuisance of the free public school exists, so that, peradventure, some coming genius could seize upon the truth evolved, elaborate and extend it, till the light of wisdom, and the weight of logic, would be irresistible,—crushing out, sweeping away forever that terrible burden to the poor, down-trodden, tax-ridden people—the public school.

The editor recites the fact that in the grammar schools of Chicago these ten branches are taught: Reading, Grammar, Geography, Arithmetic, History, Spelling, Writing, Drawing, Music, and Miscellaneous, whatever that may mean. The cost of imparting instruction in these several branches is about a half a million dollars, annually.

The time required to complete the course is eight years, of forty weeks each. Evidently, then, the cost of instructing the boys and girls of Chicago, alone, in these branches amounts to the enormous sum of four million dollars.

Now the plan proposed by the thoughtful editor is to cut out of the course at least two of these branches, the “more useless” or strictly ornamental, say music and drawing. This, our wise editor tells us, will reduce the expense one-fifth, or will save one hundred thousand dollars each year.

How much genuine comfort might be obtained if this amount were judiciously expended in lager beer and tobacco! Not only would there be this saving of money, we are told, but a corresponding or proportional amount of time would be prevented from going to waste. Drop the purely ornamental studies and the course could be pursued in four-fifths of these eight years.

Here then would be a saving of more than a year and a half to each pupil.

Now what can be more simple, what more logical!

The trouble is our editor grasped but a fraction of the whole idea. Reduce the number of studies ten, instead of two, and half a million of dollars would be saved every year. Why, in ten thousand years this would amount to *five billions* of dollars, saying nothing of the interest. Then the time that would be saved is immense. Eight years for each pupil, or an aggregate to the school children of Chicago of *two hundred thousand* years.

Now think of the work a good, willing boy or girl could do in 200,000 years! and then think of all this time wasted in attending the public school! “O, the *Times*,” etc.

But I am satisfied that the people are so indifferent to their real in-

terests, or are so bigoted, warped and prejudiced in their notions about these things, that it is folly to attempt any genuine or radical reform. If I could but take the dear people up with me to my high vantage ground, where they could see as I and the truly progressive editor see, then I should be for once hopeful, if not happy.

But alas! this great uplifting I cannot bring about; for this purging of the films of blindness I have not the clay nor the spittle; this unstopping of the deaf ears would require more intellectual nitro glycerine than I at present can control.

Yet it may be possible that some approaches may be made to this greatly desired end, by adopting something like the plan suggested for the improvement of the Chicago grammar schools.

I would go farther, however, than the editor in his wisdom and timidity proposes. I would cut out and remove from the course all but two of the branches, for I regard eight of them as "ornamental". Reading and Arithmetic might for a time be retained in the schools. There is, probably, a shadow of argument in favor of the retention of these studies. People can make their few real wants known without being familiar with Lindley Murray, Mulligan, or Howland; and as to history, how can it help the average voter in the discharge of his duty as a free American citizen, to know that Columbus discovered this country in 1492, or that William the Conqueror invaded England in 1066. Then as to Spelling,—why it is a pretense and a fraud. The study as usually pursued cramps, dwarfs the intellect, compelling it to move in fixed ruts, or grooves, instead of permitting that ease and freedom of expression which nature designed.

But why waste ink and paper, and time, arguing a point that is, or ought to be, so clear!

My plan is to reduce the course to two studies, reading and arithmetic, though I am fully persuaded that these might be included in the dropped list. And I hold to a mental reservation that these two shall ultimately be stricken out.

Why, the idea that knowledge, or education, such as is acquired in the public school, is essential to the peace, prosperity, moral or spiritual welfare of a people, is one of the most preposterous absurdities that ever was conceived.

We need not look to foreign countries for evidences of the fact that education is not necessary, but, rather, a useless, "ornamental," luxury.

A dozen years ago we had in this country four millions of people, on whom not one dollar of the public money was squandered, not one hour of

time fooled away in giving instruction in reading, etc., and yet these four millions of human beings enjoyed tolerably good health, were regularly vaccinated, attended camp-meeting, and other visible means of grace, supported themselves comfortably, and contributed liberally to the support of their less fortunate neighbors, who had been blessed, or cursed rather, to some extent with schooling.

And if four millions of people could and did take care of themselves and others without a particle of public school education, cannot thirty-six millions support *themselves*, even though they may know something of arithmetic and reading?

Well, let us adopt for the present this plan as a compromise, ever looking, however, for better things. If we reduce the course to two studies, the cost will be but one-fifth that of the present, thus saving four hundred thousand dollars each year.

The time would, of course, be reduced proportionally, as our editor assures us, and our boys and girls could complete the full course in less than a year and a half; or if only one of these branches were pursued, say arithmetic, all that the boys and girls of Chicago now learn of this subject would be as well learned in one tenth of the time, or in about seven months.

What might be saved in time and money, without sacrificing anything of value, if the people would only consider!

I am for reform, and until reform is brought about I shall be

GRUMBLER THE SECOND.

SOME THINGS TO THINK ABOUT IN CONNECTION WITH THE SIMPLE ARITHMETICAL RULES.

SUBTRACTION.

I. "Subtraction is the process of finding the difference between two numbers."

Assuming that subtraction is the opposite of addition, to which authors generally assent, and that addition is the process of finding the sum of two or more numbers, the above definition of subtraction, found in several books, is logically correct. It will be noticed that it assumes that there are two numbers at the outset.

Suppose a boy has ten marbles and gives six of them to his brother, how many has he left? Here there is only one number which is separated into two parts, one of them of a definite size. The problem is to find the size of the other. Query. Is this operation subtraction as defined above?

II. "Subtraction is the process of taking one number from another."

This, like the first, is a common definition. It also presumes two numbers at the outset.

One boy has ten marbles and another has six, how many more has one than the other? Suppose they proceed, in accordance with this definition, to find the difference. Each lays his marbles in a group on the table. How is one group to be actually taken from the other?

III. "Subtraction is the process of taking part of a number away to find what is left." This definition starts with only one number. Does it embrace the true idea of subtraction as the opposite of addition? By it the first of the foregoing problems can be solved. Can the second?

MULTIPLICATION.

Without attempting a formal definition, multiplication is a method for finding larger quantities. The same result can be reached by addition. In its scope it is more limited, since the numbers with which it deals must be equal. It is commonly defined as,

"The process of taking one of two numbers as many times as there are units in the other."

I lift a book six times. Have I six books as the result? Have I in any sense performed an addition? Is the definition a true statement of what is done when we take six twos of marbles and obtain twelve marbles?

DIVISION.

As multiplication is a process for finding an amount, so division is a process for finding a remainder. It shows, at the same time, how many times the subtrahend—divisor—must be subtracted to find the remainder. Hence it ascertains how many times one number is contained in another. Would not the definition be better if it suggested some relationship to subtraction?

Again, since multiplication shows the sum of several equal numbers,—*how many* being indicated by the multiplier,—division shows how many numbers equal to the divisor can be subtracted from, or are found in the dividend,—the *how many* being indicated by the quotient. So the quotient in true division, must be, like the multiplier in multiplication, an abstract number.

Problem.—A man gave forty apples to five boys, so that each had the same number of apples. What was the number?

Is this really a problem in division?

L. S. E.

STATE EXAMINATION.

(1876.)

ASTRONOMY.

(Time, 70 Minutes.)

1. In about what time does light pass from the Sun to the Earth ; to Neptune ; to the fixed star nearest the Solar System ?
2. How many degrees in breadth is a temperate zone of the Earth, and why ?
3. What is the least possible, and what is the greatest meridional altitude of the Sun during a year to an observer on latitude 40° N., and about what are the dates of these occurrences ?
4. Does the local time of the rising and the setting of the Sun, on a given day, depend upon the latitude, or upon the longitude, of the location of the observer ?
5. Should the earth retain its present shape, but cease to revolve upon its axis, would there be Precession of the Equinoxes ? And what, if any, would be the resulting change in the relative positions of the Equinoctial and the Ecliptic ?
6. Find the distance through which the moon should fall toward the earth in one second of time ; 16.08 feet being a measure of the attractive force of the earth at its surface. Write the proportion giving the result in feet.
7. Give Halley's method of finding the solar parallax by observations of the transit of Venus. Draw a diagram, and illustrate so that your idea may be clearly seen.
8. What are the fixed stars supposed to be, and why ?
9. Name the four fixed stars nearest the Earth
10. How are the constituents of the solar atmosphere found by use of the spectroscope.

ZOOLOGY.

(Time, 50 Minutes.)

1. Give a comprehensive definition of an animal.
2. Do birds approach nearer mammals or reptiles in their affinities, and why ?
3. Give, in regular sequence, a list of the terms used by classicists, passing from the individual to the kingdom, and giving a brief outline of the generalizations which lead to the use of the terms.

4. Indicate the differences between a reptile and a fish.
5. Define homology and illustrate the use of the term by comparing individuals of at least six families of the vertebrates.
6. How do insects breathe, and how does the heart of them differ from that of mammals.
7. Describe the metamorphoses of the Batrachians.
8. Contrast the structure and manner of growth of the horns of the deer and sheep.
9. Give a brief statement of the reasons which would induce you in your private studies to make a specialty of some department of zoology.
10. What do we know concerning the origin of life? What is meant by spontaneous generation?

NATURAL PHILOSOPHY.

(Time, 60 Minutes.)

1. Make a concise argument proving, first, the indestructibility of matter; and, second, the indestructibility of force.
2. Define heat, light, matter and motion.
3. What is the physical source of all terrestrial motion, except motions of the earth?
4. Name the six simple machines called the mechanical powers.
5. Explain how the pendulum is used to determine the form of the earth.
6. Give three laws for the vibration of strings.
7. What is sound? Give its velocity per second in air; in water.
8. What is an octave in music? Define the diatonic scale.
9. Why does the prism decompose light? Give the names of the seven colors of the spectrum in their order.
10. A power of 20 lbs., by means of a screw, exerts a pressure of 800 lbs. The threads are one-half inch apart; what is the circumference of the circle in which the power moves?

PHYSICAL GEOGRAPHY.

(Time, 60 Minutes.)

1. Describe and explain the general features of the drainage of North America.
2. Describe the circulation of the sea by means of ocean currents. Give the cause.

3. Give the reason for the marked contrast in the temperature on the opposite coasts of the North Atlantic.

4. How are glaciers and icebergs formed ?

5. Name the five great types into which mankind is usually divided. What three of them are found in Asia ?

6. Give the reasons for the various colors of the clouds, when the sun is near the horizon. Why do red and orange tints prevail ?

7. Give a brief description of the lakes recently discovered in the interior of Africa ; names, altitude, latitude and longitude.

8. Give the points of similarity and contrast of the land masses of the old and new worlds, in respect to length, breadth, mountain chains, peninsulas and location of the highest mountains.

9. Explain the phenomenon of rain, and give the reasons why most of the rain that falls in Illinois comes south west and west.

10. What is the source of all animal and vegetable life on earth ?

*THE RELATIONS BETWEEN THE COMMON SCHOOLS AND THE P HIGH SCHOOL.—A PLEA FOR THE HIGH SCHOOL.

It is not my intention to present all the arguments that could be urged in favor of the retention of High Schools. I shall advance a few of the most practical, assuming that High Schools can be so conducted as to benefit their pupils and through them the entire community. Perhaps some here may have noticed the attacks upon the High Schools of Jacksonville and Aurora, which have only proved themselves—as I imagined would be the case—instrumental in arousing a greater enthusiasm in behalf of this branch of our grand system of education.

In these cases the same old objections were brought forward, that the poor were taxed for the education of the children of the rich, and that the scholars had better be at work, and others equally frivolous and absurd.

I propose to adduce some few facts and considerations to show, if possible, that there is a necessity for public High Schools, that they are an essential part of our civilization and that they can be legally established and maintained. The development of the American character demands that we maintain opportunities for higher education at public expense. Our High Schools, art galleries, and free libraries are not needless expenses but are a

*Read before the Cook Co. Principals' Association, Oct. 14th, 1876.

wise expenditure of money. It is just as important that the poor child of genius should have the means of obtaining a good education, and of becoming a statesman, or of enjoying all the advantages of a thorough education, as that the fortunate one, the child of the wealthy, should have these opportunities. The vast majority of those who are found in the schools are children and youth of good habits, noble impulses, many of them possessed of more than ordinary talent, but children of parents who could not possibly otherwise have given them anything more than a rudimentary education. In the High School they are drilled and taught, the great fields of study are opened to them and then they are fitted for those posts of honor and professional service, which when we see the work that they accomplish, and the manner in which society is enriched, make us proud of the schools in which they were prepared. To abolish these schools and compel every child of poor parents to depend upon private charity for a superior education would be to take a step of a hundred years backward; it would speak defiance to what our leading educators have been toiling for, it would be a step which we shall not undertake, even though it would appease the demands of a few rich persons, many of whom in heart, simply would aim at the complete overthrow of our system of public schools. Our State schools are one grand fabric. The higher schools are incentives towards a better class of work in the common or lower grade schools.

It is education that makes a nation strong. In this the strength of Germany consists, and if then it be true that better work is accomplished, that more progress is made by these students simply because they see that there is a chance for them to better qualify and prepare themselves for college and for the walks of life, is not this an argument of itself for the establishment and maintenance of High Schools?

They are not simply to prepare students for college. Indeed, I hold that this work should be done by them, but that to me does not seem to be the first requirement, nor in fact of the most importance. The majority of the pupils who enter the high school, after remaining in it a while, perhaps to graduate and perhaps not, finally find their way into business. Does any one claim that because they are educated they cannot do as good work? Will not, rather, everyone of careful observation allow that the better a man is educated the better artisan he makes? It is a general truth, and is demonstrated by a careful study of facts.

Educate the carpenter, educate the blacksmith, educate the rail-splitter, educate the merchant, educate the doctor, educate the minister. How much more scientifically in *all* cases his work will be performed.

That it is expedient to support a high school for the sake of improving the lower schools is then one of the strongest arguments in favor of schools of the higher grades.

The average expense of a high school is about one tenth that which is expended for the other schools. Without the high school the number of scholars in the higher grades of the common schools would gradually diminish, and if one were to compensate for the want of a high school, he would find it necessary to expend at least three times as much as he now does in order that they might obtain the same proficiency as before, and even then it is doubtful if the undertaking would succeed. Each grade has its own separate work. It is the part of the primary grades to train the perceptive faculties and to develop the power of attention. All the efforts of the child from six to nine years of age are used in the cultivation of this one power of perception.

It is the part of the intermediate and grammar grades to train the reasoning powers, which begin to develop in the lower of these two and expand in the higher, while the whole beautiful fabric is crowned by the high school in the enlargement and breadth of the faculties by culture and adornment, which tend to make the student a better citizen and a better member of society. Culture does not begin in the high school, but its broad development should be here made.

Aside from the economic view of a high school there is another argument which with us bears great weight. Each community must, as far as possible, educate its own directive power. This should be done largely by the high school. If a community does not educate its own teachers, its candidates for instructors must be sent away to obtain that which could as well be secured at home, and they will be compelled to pay a high premium for the foreign product. The bulk of the education should be secured here. Here the foundation is laid. The finishing touches may be given elsewhere. This education, both as to quality and quantity, should be the best that can be given. In the first days of the Republic none were too good to be teachers; the college graduates, the son or daughter of the clergyman, the doctor or the judge, were *all* enrolled in the ranks, and as much was to be taught as the people demanded, and for which they were willing to pay. "Chief Justice Henshaw ruled, that it was lawful to teach Hebrew in the common school if the people desired to pay for it." What is the ground for discriminating between Arithmetic and Algebra, History of the United States and general History, Grammar or Rhetoric? I am constrained to think that he who raises an objection and endeavors to draw a line between the differ-

ent teachers, does so not because he may object to any one of these, but simply because in heart he is not in sympathy with any part of the whole system of public instruction. The only cure for the acknowledged inferiority of the most of our country schools is to provide better teachers. As is the teacher, so will the school be. The teacher needs to be better trained. Trained first in the study of those things which are again to be taught (and here is the proper province of the high school, and where the greater portion of the education should be given), then, possibly, trained in methods which should come *after* the high school course. It is charlatanism to think that a few months' course in methods, where there is little or no real foundation in knowledge, will give us apt and efficient teachers. Knowledge is the firm foundation. Methods are only the upper work, the pleasant adornments which help to beautify the whole structure.

It is estimated that 120,000 new teachers are demanded each year for the schools of the United States. Of these, statistics show us that about 6,000 are educated in the Normal schools. The rest are mostly educated in the high schools. Do you think our general system of education would maintain its present good standing if these schools of preparation were to be discarded? Assuredly not.

(CONCLUDED NEXT MONTH.)

EDITOR'S DEPARTMENT.

We present in this number the programme of the State Association. As will be seen, the meeting will be at Champaign, December 27-29. The place is easily reached, and we should have a rousing meeting. The topic, "What changes are required in the School law?", should have a careful discussion, and if it is the conclusion that changes are needed, the Association should see to it that they are accomplished. There was a time when the teachers of the State had some influence in determining the character of legislation on educational questions. It would seem as if they should know something of the needs of the time.

When our worthy legislators desire information on other topics they seek such information from acknowledged experts; but every one seems to consider himself equal to the school question.

That the schoolmaster has cut but a slight figure in politics, however, is chiefly due to his own neglect.

The Association should endeavor to recover its lost potency, and should make itself felt at Springfield, at the biennial gathering of our law-makers. We shall be glad to hear from some one in our next number. Let the subject be started in advance of the meeting.

Why has it never occurred to the schoolmaster before to determine some of the questions that disturb the pedagogic mind, by the conclusive and satisfactory method in which political questions are settled? We saw the experiment tried a short time since, and it worked like a charm.

There are certain topics that are as inevitable as death and taxes. Let a half-score of teachers assemble and organize, and the old interrogatories appear upon the scene. "Is it well to inflict corporal punishment?" "Can the schools be made more effective?" "Is it wise to award prizes for excellence in scholarship and deportment?" and so on through the dreary list. Why shouldn't the State Association take a half-hour some day, and finally and completely settle by a direct vote a hundred or so of these standing conundrums, so that they shall cease to molest? Is the schoolmaster to be perpetually haunted by impertinent interrogation marks? But the habit has possession of us, and we can only inquire with the late Mr. WARD, "Why is this thus?"

Valedictory.—The pressure of other cares has induced me to relinquish to Prof. COOK, my interest in the SCHOOLMASTER, from this time forth. As my connection with the periodical has been little more than nominal for the last three months, I need not say that this change will have no effect to injure the SCHOOLMASTER. Its present excellence, high standing, and financial prosperity, are directly and chiefly the results of his good judgment, industry and untiring energy.

Five years and a half ago, I became associated in the management of this journal. During this time, I believe it has steadily increased in excellence and influence. It has always paid expenses and something more, notwithstanding the "hard times," and the fact that so many other journals have succumbed. But it has never been more prosperous, or promised better for the future, than to-day. Yet its influence should be extended four-fold, and I earnestly bespeak for it the hearty co-operation and active assistance of its numerous friends.

I shall hope to speak through its pages, often, to old friends, although the responsibility for its management will now rest wholly with another.

E. C. HEWETT.

As we write, the preliminary steps in the trial of SULLIVAN, the slayer of HANFORD, are going forward. According to the newspaper reports, the accused has been allowed virtually to select his judge; and the case is managed in such a way by this judge, and the three astute lawyers for the defence, that it looks very much as though the trial is to be a mere farce, like so many others, merely a preliminary formality for turning the prisoner loose. The impanneling of the jury is found to be a very slow matter, as the court seems to proceed upon the principle that no man is fit to be on this jury unless he is an ignoramus, who has not read the papers nor thought upon the subject at all. These sharp lawyers well know what kind of men they are likely to be able to wind around their fingers.

Now, this is only one of a multitude of cases that may well cause thoughtful men to ask if the time is not soon coming when no intelligent man can think of courts or trials, or any of the forms of so-called justice with anything but merited contempt. Criminals, if caught, are caught at great expense, the trial involves a great expense, and then, through the incompetency of the jury, or some technicality in law, or some keen trick of the lawyers, he escapes; or, being convicted, the pardoning power of the executive turns him loose, as in the famous whisky cases. But, the dockets are full; judges and lawyers and sheriffs are busy; court houses and jails are built, and the poor, long-suffering public meekly pays the bills.

We, as teachers, ought to train our pupils to be law-abiding citizens, to have respect for laws and courts; but, unless things change, and that thoroughly, the time is not far distant when we can do this only by stultifying ourselves, and by sheer force of will repressing every feeling of justice or manhood. Here is a field for genuine reformers.

In the August number of the *Popular Science Monthly* may be found an article entitled "American Colleges *versus* American Science." In this article, the writer arraigns the colleges of our country as the foes to scientific progress. We heartily sympathize with much that he has to say. No doubt it would be better if we had fewer and abler colleges instead of such a multitude of weakly ones. Of course, he charges Sectarianism in religion, with much of the responsibility for this policy of *scateration*. Such a charge is common; we hear it iterated and re-iterated in scores of ways. Now, we no more believe in "Presbyterian Mathematics, Baptist Chemistry, Episcopalian Classics, and Methodist Geology," than he does. But, before religious people, who have denominational creeds that they hold very dear, are

condemned too savagely, we demand for them candid answers to a few plain questions :

1. Are not our colleges, poor as they are, better than none ?
2. Have not almost all of them been established and endowed with the money of religious men, who were earnest for the upholding of that particular form of faith which they held ?
3. Is all the wealth of the country, or the major part of it, in the hands of such men ?
4. If not, why do not these men, who are so disgusted with the present state of affairs, and who know so well what sort of colleges we ought to have, bring influences to bear upon rich men who are not religious or who are sufficiently *broad* in their views, to get them to endow such colleges as we ought to have ?
5. Is there anything in the Constitution to forbid such a course ?
6. If not, would it not be wiser and more manly to do something positive of this kind rather than to snarl everlastingly at conscientious, though perhaps mistaken, men for what they have done in the way of providing such means for the education of youth as we have ?

The Educational Association of Virginia has grappled with the existing text books on history of the United States, and, if it accepts the conclusions of its committee, consigns them, without exception, to the bad.

One J. W. JONES, D.D., presented the report of the Committee. He declares that all of the fifteen histories that he has examined are unfit for Virginia schools. They are unfair to the South from the history of the early settlements to the close of the "war between the States." He further says:

"They so tell the story of the early contests with the Indians as to make every Northern settler a hero and every woman a heroine, while the settlers at the South are represented as accomplishing by rapine and fraud what the manly courage of New England honorably attained. They claim for the North the lion's share of the glory of beginning and successfully prosecuting the war of the Revolution, and ignore or slur over the plain historic facts that the first voice for separation from Great Britain was raised at the South ; that a Virginian moved and a Virginian wrote the Declaration of Independence ; that a Virginia commander-in-chief led the colonists to victory ; that the South furnished troops out of all proportion to her population ; and that while Northern soldiers seldom, if ever, came to the relief of the South, almost every battle-field at the North was illustrated with Southern valor and drenched with Southern blood."

We fear that Brother JONES' eyes are poor or that his digestion is bad. It has been our fortune to see and use several of these books, and we re-

member no one of them that does not give equal credit to South and North for the heroic deeds of Revolutionary times. We know of no book that "slurs" over the fact that RICHARD HENRY LEE was a Virginian, that JEFFERSON'S home was in the same State, and that GEORGE WASHINGTON was a shining ornament of the same illustrious Commonwealth. Why does n't the writer designate the offending authors and show wherein they have so sadly departed from the facts of history? He does, indeed, give special mention of one, but fails to substantiate his charges by a single quotation. Of this book he says:

"It is unquestionably the fairest of any of these histories, and yet it abounds in misstatements, misrepresentations, and perversions of the truth, on well nigh every page, and is utterly unfit for the school room or the family."

Why not inform a suffering public respecting the heresies upon which they are feeding? Why does this repository of the facts of the case withhold the desired corrections? The article concludes as follows:

"I would not carry into the school room 'the bitter memories of a stormy past,' or have our children taught anything which would mar their devotion to the Union and Constitution of the Fathers of the Republic. But, on the other hand, I would not permit them to be taught that, in the great contests which have divided the country, the South has been the aggressor; or that in the war, which resulted, their fathers were 'Rebels' and 'Traitors,' or bore themselves unworthily in the great struggle.

"Nay, I would have them taught the whole truth of our history, the true story of the colonization of these Western wilds, the Revolution of '76 and the history of the country, until Northern fanaticism forced the South to reassert the principles of the first Revolution. And I would have them taught that when, in 1861, their fathers took up arms, they were patriots as true as ever drew sword in the cause of freedom, and made a fight against overwhelming odds, which should illumine one of the brightest pages of the world's history—that LEE, and JACKSON, and STUART, and HILL, and SIDNEY JOHNSON, and POLK, and ASHBY, and the thousands of others of our soldiers, who fell in that contest, do not sleep in dishonored graves, but were patriot heroes, whom *the world* should delight to honor."

Here's richness! Of course it won't "mar their devotion to the Union and the Constitution" to instill into their minds the cheering conviction that the men who endeavored to destroy the Union were doing a very proper and honorable thing. And wherein, Brother JONES, was secession a reassertion of the principles of the first Revolution? Trace the analogies and substantiate them and we will cordially yield. Teach the children, if you will, to honor LEE, and JACKSON, and STUART, and HILL, and the rest, for their personal bravery and for their devotion to what they conceived to be right;

but teach them at the same time that the State Rights dogma was a fatal error of their political creed. Teach them that we are a nation, and not a mere aggregation of States, any one of which may stray from its appointed place at pleasure. Teach them that there is no North, no South. Teach them that the bitter spirit of intolerance that permeates "the report of the committee" has no parallel in any respectable educational circles in the North. Teach them that the North deplores the sad fact that the South is unwilling to confess its wrong. Teach them that patriots everywhere have no desire to wither the flowers on the graves of their heroic but misguided dead, but that they earnestly hope that the new generation at the South may grow into manhood with the thought that the North sowed their sunny fields with northern dead simply to preserve the union of the fathers unbroken.

R. W. PUTNAM has severed his connection with BREWER & TILESTON, and enters the service of the APPLETON'S. His headquarters will be with Mr. LANE, at 117 State street, Chicago.

COWPERTHWAIT & Co. have in press "a Child's first book in written language," by the well-know author, PROF. GREENE. It will be followed by the second book in due time.

Mr. S. H. WHITE, of Peoria, writes us that the County Normal School is fuller than ever before. Why doesn't some other county, or combination of counties, try the experiment?

One of the most notable events of recent occurrence in book-selling circles, in central Illinois, is the removal of MAXWELL & Co., of Bloomington, to their new quarters on Jefferson and Main streets.

In 1858, J. W. MAXWELL, the senior member of the firm, became a partner in a small retail book-store on Center street. One room, of modest dimensions, sufficed for their trade. The writer hereof has vague recollections of an antiquated establishment, with an air that was very suggestive of old folios and dusty manuscripts. An annual business of twelve or thirteen thousand dollars was all that the books indicated. There was no promise of future success in any feature. They shared in the general prosperity of war times, however, and in 1863 began the wholesale experiment, putting one man on the road. Shortly after, Mr. S. A. MAXWELL, familiarly known as "Gus," then but fifteen years of age, "mounted" a sample case, and went forth "conquering and to conquer." It was the beginning of a new era

for the house. The young salesman soon developed remarkable business qualities, and in 1866 was duly installed as junior member of the firm. He assumed control of the wholesale department, and with his characteristic energy, pluck, economy, and care, succeeded in establishing a business that, in the brief space of a single decade, has made him a comparatively rich man, and Bloomington a familiar name to the book trade of the west.

The elegant building now occupied by the house was built for them by J. W. EVANS, the well known builder, and has a front of twenty-two feet on Jefferson street, and, forming an angle around the corner building, presents a thirty-one foot front on Main. It is four stories high, and is a model of neatness and elegance. It is absolutely crowded with stock, and there is no waste room in all its sixteen thousand feet of floor. Instead of the diminutive room of 1858, they have the equivalent of a room 25x640.

The basement is occupied by furnaces, etc., and by the ink factory, from which 72,000 bottles emerge annually.

The first floor contains Mr. MAXWELL's private office, handsomely furnished, the counting room, and the retail department. The last is under the charge of Mr. H. C. PREVOST. Any sketch of the house would be imperfect without mention of Mr. PREVOST, since to his tireless industry and genial good nature is largely due the extensive trade of this department. A novel feature of this floor is a nicely furnished apartment for visitors.

On the second floor is the wholesale department, under the immediate supervision of Mr. C. A. COE. This floor is crowded with the various goods incident to a large jobbing trade and is furnished with ingenious time-saving devices in the way of sample cases, elevator, etc.

On the third floor is the stationery department. Here envelopes by the cord and paper by the ton greet the eye.

The fourth floor is occupied by the paper hanging department.

Two or three items will give some idea of the magnitude of the business. Eighteen men are employed. They sold last season 3,500 sets of croquet, twenty-three car loads of paper, 5,000,000 envelopes, and other goods in proportionate amount.

All of this vast business passes under Mr. MAXWELL's eye, and receives his personal attention. He has impressed his habits upon the employes and all seem careful, attentive, and industrious. The building is arranged so that goods can be received or sent and no indication of it appears within, as the elevator discharges its loads upon the street.

When an inland town like Bloomington competes with the metropolis in the book trade she may well be proud of the enterprise of her citizens. May success continue to attend the MAXWELL's in "their new departure."

It was our good fortune, not long since, to be present at a session of the Chicago Principals' Association. It was their first meeting for the year. Considering the somewhat revolutionary action of the Board, we were hardly prepared for so good-natured an assemblage. We congratulate that body upon its philosophy. It more than looks the situation in the face,—it stares it out of countenance.

Its mental attitude is very suggestive of "patience on a monument smiling at grief." Many of the principals have suffered a reduction of seven hundred dollars within two years. They "stand by" for the present, but they will quietly withdraw, doubtless, as better opportunities offer.

We have received the following, which will be of interest :

SPRINGFIELD, Ill., October 13, 1876.

EDITOR SCHOOLMASTER :—I transmit herewith a list of those to whom State teacher's certificates were issued in 1875, and also those who passed the examination at Lincoln, in May, 1876, which should have been included in the statement sent you September 16, 1876 :

Ellen P. White, Lyons, Iowa ; James Ellis, Park's Corners, Boone Co., Ill.; Joseph G. Wright, Ogden, Champaign Co., Ill.; Henry A. Smith, Sterling, Whiteside Co., Ill.; Mary J. Howard, Berlin, Sangamon Co., Ill.; Elliot Whipple, Westfield, Clark Co., Ill.; R. H. Beggs, Wilmington, Will Co., Ill.; Joshua Thorp, Beardstown, Cass Co., Ill.; Mary A. West, Galesburg, Knox Co., Ill.; Mary Hartman, Galesburg, Knox Co., Ill.; Libbie E. Kennedy, Sandwich, DeKalb Co., Ill.; Henry C. Cox, Farmington, Fulton Co., Ill.; Albert E. Chase, Hartford, Wis.; Flora Farnsworth, Dundee, Kane Co., Ill.; Emma R. Pierson, Marengo, McHenry Co., Ill.; J. Lawson Wright, Adeline, Ogle Co., Ill.; Shadrack C. Bond, Chester, Randolph Co., Ill.; Henry T. Wright, Cobden, Union Co., Ill.; Edwin Auerswald, Mascoutah, St. Clair Co., Ill.; Justin E. Dow, Peoria, Peoria Co., Ill.

Certificates were issued to the following five persons on the examination held at Lincoln, March 23, 1876 :

Benjamin S. Hedges, Mt. Morris, Ogle Co., Ill.; Benjamin F. Stocks, Bethalto, Madison Co., Ill.; Joseph Harker, De Soto, Jackson Co., Ill.; John L. Shearer, Rockport, Jackson Co., Ill.; J. C. Scullen, Elkhart, Logan Co., Ill.

Four certificates have been granted since September 16, 1876, on a re-examination of the papers, to the following persons :

Hosea B. Lathe, Lyndon, Whiteside Co., Ill.; Emma C. Pierson, Jacksonville, Morgan Co., Ill.; Edwin A. Doolittle, Carrollton, Green Co., Ill.; George W. Dinsmore, Time, Pike Co., Ill. Respectfully,

S. M. ETTER, Supt. Pub. In.

The *Pennsylvania Journal* has the following to say about our exhibit at Philadelphia:

Of manuscript work 494 volumes are presented for inspection, the largest number found in any one exhibit. Nine counties present volumes from ungraded schools. The graded schools, including the high schools, of many cities and towns, are well represented. The private seminaries of Illinois are more fully shown than those of any other state. The two Normal Universities, two county Normal Schools, those of Cook and Peoria counties, and one city Training School, present the results of their instruction. Five Colleges and the Industrial University are represented, the latter, as we have before said, more fully and adequately than any other college or university. The Illinois exhibit alone comprehends a complete school system, presenting, indeed, some features, as county normal schools, not found in any other state. The character of the school products shown justifies the interests represented. The country school work, although small in amount, was fair, Ogle county, perhaps, ranking first. We were very much pleased with a volume from Peoria county, showing the teachers' work in the county institute.

The city of Chicago alone presents 88 volumes of scholars' work from its graded schools. Besides the volumes showing the usual branches of study pursued in all the schools, from primary to high, here are found a "History of Chicago from 1763 to 1876," a volume of special work in German, a volume of special work in composition, and a volume of work by deaf mutes. Entire grade work, entire class work, and selected work are shown. The exhibit is complete, and in every way creditable to the management. Composition and mathematics seemed to us the excellent features peculiar to the Chicago exhibit. The execution and modes of presenting the work of pupils were somewhat disappointing. The drawings, including mechanical drawings, from the Evening High School, were comparatively good.

Aurora came next to Chicago in the amount of material presented, perhaps not next in the instructive features of its work. The portion of the Aurora schools under the care of Prof. W. B. Powell, Superintendent, are deservedly famous throughout the Northwest at least, for their excellence. The scholars' work on exhibition bears out the reputation of the schools. Perhaps, at first sight the observer may be dissatisfied with the appearance of manuscripts—and the penmanship is not equal to that of many other schools, nor as good as it should have been—but here, as in Cleveland and Indianapolis, we find the tokens of independent professional thought and teaching. And we must frankly say that the student of education, with a vast field before him and but little time at his command, will profit most by a close study of these representative exhibits. One peculiarity of the instruction in the Aurora schools is its independence of text-books, none but readers and geographies being used below the high-school grades. Each subject is shown throughout from the second grade, to the lowest, in a separate volume or portion of a volume. And it is almost wholly, evidently, the daily work of pupils transferred to bound volumes. The method pursued in each branch from year to year is clearly indicated, and the progress of pupils in accordance therewith made obvious. And there is a method with consecutive steps for every branch. The teachers had given to the results reached by the pupils in their statements and answers specific values. Composition is thoroughly and systematically taught. The impromptu essays presented were satisfactory evidences of the fact. In spelling, all words liable to be used by the pupils were taught. In arithmetic, the fundamental operations were taught from the first. Aurora has its own training school in which teachers are fitted for the schools.

Peoria was well represented, both as to quantity and quality. We examined the work of one school, the Second District, and found in the manuscripts what we expected to find from previous knowledge, good work shown in most of the branches. We found ourselves regretting that the reading could not be in some way exhibited, as we remembered that the Leigh system is very thoroughly and successfully taught in these schools.

The Peoria County Normal School presented results of examinations, and essays on general subjects from the pupil teachers. It is evident that this school is doing a noble work for the county in which it is located. Its influence is not by any means limited to county boundaries.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

The October meeting of the Principals' Association was held at the rooms of the Board of Education on Saturday morning, Oct. 7th. Mr. PICKARD, who is Centennializing, etc., on leave of absence, was away, leaving Mr. HOWLAND, the Vice President, to preside.

Several matters of minor importance connected with the intercourse and reports of teachers and the Superintendent's office were referred to by Acting Superintendent DORR, and such details given as were calculated to facilitate the transaction of that class of business.

In the line of theory and practice of teaching, Mr. DOTY suggested the wisdom of impressing upon teachers at the beginning of the year, and especially new teachers, the propriety of care and regard for the just rights and feelings of pupils, and of uniform courtesy in dealing with their parents. Mr. DOTY further suggested that it might be well to caution pupils against gazing at visitors, with a view to preserving the reputation which the pupils of the schools of Chicago have heretofore maintained and deserved in that respect. Finally, Mr. DOTY recommended that, with the approach of cold weather, some of the larger pupils be detailed to look after the comfort and safety of the younger ones on their way to school.

After some difficulty in getting started, a discussion was had on the topic of "Memorizing" in primary grades. The speakers were Mrs. YOUNG and Messrs. DOTY, SLOCUM, MERRIMAN, G. D. BROOMELL, and LOOMIS. The prevailing sentiment of the speakers was in favor of a considerable amount of memorizing in those grades.

A discussion as to the amount of geographical work, outside of text-books, in which the participants were Messrs. BRIGHT, STOWELL, BAKER and MAHONY, resulted in the passage of a motion to the effect that in the opinion of the Association such work should be discontinued. The subject for consideration at the next meeting is Mental Arithmetic.

Some uncalled for, unkind, and uncharitable innuendoes and remarks in reference to the work and usefulness of certain officers of the Board of Education, who were unexpectedly re-elected by the new Board, lead us to suggest that mere partisanship and partisan feeling are about as objectionable on one side as on the other.

We take occasion to say a good word for "THE CATHOLIC WORLD." Its religious views are maintained with great consistency and firmness, and with moderation and temperance as well. Its distinguished editor, who has, we believe, traveled all the way from extreme Calvinism to the Vatican, via Brooke Farm, has seen too much of the world and is familiar with too many phases of the human mind and states of the human heart to ever be guilty of either unchristian expression or unchristian feeling. The magazine indulges in frequent metaphysical, theological, historical and biographical discussions and essays of various kinds. Its mechanical appearance and make up are faultless, and its pages are always characterized by great literary and philosophical excellence.

The status of music in the schools of this city is shown with some force in the following heading of a subscription list which has been circulated:

"Music has been taught in the public schools of Chicago for the past thirteen years with the most satisfactory results. From reasons of economy, the Council made no appropriation to continue this branch of study this year; however, the Board of Education consents to reinstate Mr. BLACKMAN, the well-known teacher of music, in the schools, if the money to pay him does not come from the city treasury. Fifteen hundred dollars will secure the best of music teaching to 40,000 children of the city, and it is not doubted that our private citizens will at once make up this amount. Mr. FREDERIC W. ROOT, No. 156 State street, has been appointed agent to collect subscriptions, and hand the money to Mr. L. J. GAGE, of the First National Bank, who will act as trustee. A full record of the transaction will be made out and left with Mr. C. C. CURTIS, manager of the Root & Sons Music Company, where it may be seen by any who call for it. Toward the above object we agree to contribute as follows, etc., etc."

It is understood that the musical societies of the city have subscribed liberally for this object. This liberality of theirs is very suggestive. It speaks of their love of music and their faith in its humanizing and civilizing power; and it speaks their testimony—the testimony of competent judges—of the efficiency and success of our previous musical work. This testimony is no less true than deserved, and from one point of view is a sufficient compensation to Mr. BLACKMAN for the very objectionable discrimination that has been made against music and him.

The election of Mrs. YOUNG to the principalship of the SCAMMON SCHOOL, and her consequent admission to the Principals' Association, promises to mark a new era in the history of that body. Mrs. YOUNG will talk, and, unlike many talkers, when she talks she has something to say. During the seven or eight years of the existence of the Principals' Association the lady members, aside from occasional work on committees, have been interested, uniform and punctual, but very silent members. When the Association was organized there were only a few lady members, the principals of the "independent primaries." Now they have grown to be a multitude which no man can number. And now, behold, their voice shall be heard! Let "J. M.," who used to trail his coat in search of other words to conquer, and "BLUEBEARD," with his *penchant* for vile statistics, beware!

Rev. W. PATTON, a Congregational clergyman, preached a very remarkable sermon in Farwell Hall, during the latter part of September. His subject was "The Bible in the Public Schools," and his object seemed to be not only to urge his own views on the subject considered, but to make a record and urge others to make a record on that subject for the churches called evangelical, different from the commonly received position of those churches on the question. Mr. PATTON held that, in a nation composed of a variety of religious denominations, and in which there was a complete separation of Church and State, the use of the Bible in the so-called devotional exercises of the public schools was contrary to justice and sound policy, and would ultimately be found contrary to law. The sermon was remarkable not only in itself but in the accompanying circumstances. It was delivered in a public hall, in response to an invitation signed by many of the leading business and professional men in the city. They were nearly or quite all members of evangelical churches, and it is generally understood that the signers of the invitation indorse the sentiments of the preacher.

The new time table for the payment of teachers is published. It shows a total of fifty-nine schools of all grades. The regular days for payment during the present school year are, theoretically, October 7th, 1876; November 4th, 1876; December 2d, 1876; December 23d, 1876; February 10th, 1877; March 10th, 1877; April 7th, 1877; April 28th, 1877; June 9th, 1877, and June 30th, 1877. Payment is commenced at 11 o'clock A. M., and the last school is paid at 3:50 P. M., thus allowing an average of a little less than five minutes to a school. The payment takes place in the rooms of the Board of Education, and the monthly pay-roll amounts to about \$45,000. At the present writing the September salaries are not paid, and their time of payment is generally relegated to the realm of the unknowable.

The editor of this department has received several rather mild compliments for various things that have from time to time appeared in it. For all favors of this kind he feels and acknowledges sincere and abundant gratitude. However odd it may be thought, the editor desires to suggest a way in which those who think kindly of his work may manifest that feeling, and at the same time repay the proprietors of the SCHOOLMASTER for their care, trouble and expense in establishing and continuing this department. The way that occurs to him in which this may be done is to send in many subscriptions. Urge your friends to consider the merits of the SCHOOLMASTER when canvassing possibilities in the way of professional reading. He asks no one to subscribe who is not satisfied that he gets the worth of his money; but he thinks that all the readers of the SCHOOLMASTER should be subscribers, and that it should not suffer because it is not obtrusively pushed. All orders addressed ILLINOIS SCHOOLMASTER, 63 Washington street, Chicago, will be promptly filled.

ALFRED KIRK, principal of the Jones School, has been elected principal of the Missouri Normal School at Cape Girardeau, and assumed charge of that institution November first. Mr. KIRK had, we believe, commenced his tenth year of service in the schools of Chicago. He came to the city from Ohio in 1867 to organize the Car-

penster School, where he worked for many years. When the Jones School was rebuilt, after the great fire, he was transferred to that field, where he has since labored.

Mr. KIRK was one of the best of the Chicago principals. His work in the schools of the city was careful, intelligent and effective. He was an indefatigable observer, a philosophical experimenter, and his theories were judiciously based and wisely tested. He was not without ambition, yet all his ambition lay in the line of his work and served to make it conspicuously excellent.

To his new field of labor Mr. KIRK will take a magnificent presence and physique, long years of experience in teaching and supervision, a definite and correct ideal of the work to be accomplished, a just conception of the means necessary to accomplish it, and a reliable and ripened judgment as to what is right and what is expedient. Chicago can ill afford to spare such men as ALFRED KIRK, and Missouri is to be congratulated for securing him.

Miss MARY E. GRAVES, head assistant of the Ogden School, has resigned and betaken herself to her New Hampshire home. There is no reason to suppose that Miss GRAVES meditates any immediate "change of state," and her resignation may be charged to the want of appreciation shown by the "powers that be" and manifested by the oft-revised salary list lately adopted. Miss GRAVES was a teacher of several years' experience, and of exceptional ability. Her success was marked and uniform, and her resignation a great loss to the schools of this city.

We learn that at the last meeting of the Board of Education, Assistant Superintendent DORTY took occasion to urge upon the Board the necessity of building more school houses. This, though not a new topic, is a very timely one. For about a year past the Board has pursued the policy of renting buildings constructed for other uses, for school purposes. In this way it has come to pass that one-third of the number of schools hold their daily sessions in those unsuitable buildings, and instead of a few schools of standard size and appropriate accommodations, there is a multitude of small schools, lacking all necessary accommodations, except, perhaps, the requisite number of children to each teacher.

It is not easy to exaggerate the evil effect of this state of things. Its constant tendency is in the direction of imperfect supervision, the opportunity and encouragement of moral delinquency among pupils, and of bringing the public schools and the public school system of the city into rapid, and what is worse, deserved disrepute in the estimation of their patrons. Chicago ought not to fall any further from its proud record and pre-eminence in this matter. Its public men, and especially those entrusted with the care of the sacred interests of education, must not be blind to their duty. Hence Mr. DORTY's reiteration of the plea in favor of *school houses* is timely, and neither the Board of Education nor the City Council can afford to ignore it.

A well-earned respite from his work has been granted Superintendent PICKARD in the shape of a two months leave of absence by the Board of Education. Not the least agreeable feature of the occasion is the tender on the part of the Board of full pay during the absence. Mr. PICKARD is spending his vacation in the East.

An attempt was made last year among the principals, at the suggestion of the Superintendent, to discourage the practice of keeping or detaining children after school hours, as a mode of punishment. The usage is not entirely uniform. It was brought to the attention of one of the principals, who had prohibited the practice in his school, that some of his teachers wished a change of policy in the matter. The principal, in consequence, opened a correspondence with several other principals on the subject. By his kindness we are enabled to lay before the readers of the *SCHOOLMASTER* that correspondence. It is unnecessary to say that the correspondence was not intended for publication, but it is not less valuable on that account.

The circular letter sent by the principal in question read as follows:

DEAR SIR: It is stated by some that "many of our best schools kept pupils last year after sessions." If you will please favor me with early answers to the following questions, you will greatly oblige one who is very anxious to get reliable information and to find the best way:

1. What was your experience or observation last year concerning the detention of pupils after sessions?
2. Were pupils detained by your best teachers?
3. Were those teachers who detained pupils more successful than those who did not?
4. What is your opinion of the practice?

A. B.

FIRST REPLY.

1. Pupils not detained with approval of principal.
4. Practice very pernicious.

SECOND REPLY.

1. Pupils not detained. Responsibility thrown on pupils and their parents.

THIRD REPLY.

1. Detention *not allowed*.
4. Pernicious.

FOURTH REPLY.

1. Had no experience and made no observation concerning detention of pupils after school last year.
2. Have no knowledge of teachers habitually detaining pupils after school.
4. I believe the practice to be pernicious.

FIFTH REPLY.

1. Detention after school was *positively prohibited*. No teachers asked for the privilege or took it without asking, except a few new comers, who were soon convinced of the existence of a better plan.
4. Strong teachers do not need it. It is a bad habit.

SIXTH REPLY.

1. We had very few pupils detained last year.
2. Pupils were not detained by our best teachers.
3. Those teachers who detained pupils the most had the greatest difficulty in promoting scholars; pupils were not well prepared; high in some studies, low in others.
4. I am of opinion that it is a bad practice, one that "does n't pay."

SEVENTH REPLY.

1. Very few pupils were detained last year; none as a rule, and my *experience* is consequently very limited.
2. No.
3. No; they were generally less successful.
4. I discourage the practice, and all but forbid it.

EIGHTH REPLY.

1. Pupils are rarely detained after school.
2. By the best teachers *never*.
3. Those who detain pupils most are least successful.
4. My opinion of the practice is that it is pernicious, not only to the scholar, but to the teacher. All my best teachers leave the building immediately after school.

NINTH REPLY.

1. I never detain pupils except to complete a written exercise. Some very good teachers do it more or less.

2. My best teachers rarely, if ever, detain pupils.

3. As a rule, those who practice it to the greatest extent are my weakest teachers.

4. My mind is fully made up in relation to this whole matter of the detention of pupils. It is a *great evil*, and I sometimes feel like issuing an order forbidding it entirely. This I dislike to do, and have thought of requiring teachers to report at the expiration of each week or month the number of detentions, together with the cause and length of time of each. My teachers understand very well that the practice does not receive the approval of the Superintendent, the Board of Education, or the principal of the school, and yet they continue to practice it! These detentions probably average from five to fifteen minutes—not long enough to accomplish anything in the way of scholarship—but are the source of much demoralization in the school. A boy who has been kept after school rarely passes out of the building in an orderly manner, unless accompanied by his teacher.

TENTH REPLY.

1. I had but one teacher who did not detain pupils. Ten out of sixteen who had charge of rooms did not make a practice of it. Six did it so frequently that it became a custom with them.

2. Pupils were detained by my best teachers.

3. Those teachers who detained pupils were more successful in discipline than those who did not, but I don't know that their pupils passed any more satisfactory examinations. My observation on this matter does not lead me to any conclusions in matters of scholarship.

4. My opinion of the practice is that it could better be dispensed with; that in detaining pupils after school the teacher does herself wrong, the children harm, and inflicts an inconvenience upon the parents.

With regard to some of my answers, I ought to comment that different teachers detain pupils from diverse notions,—my best teachers from an excessive sense of duty, and a religious feeling of obligation to the moral condition of the child; my poorer teachers, from a declared determination not to assume any obligations that would call for effort beyond school hours. It has been in consideration of the better motive, that I have not prohibited it by explicit order. I have only discouraged it, or tried to dissuade. And yet this is not always the motive on the part of the medium teacher; but, as it seems to me, an inability to discriminate between the act and the motive on the part of the child, and a failure to perceive whether the offence arose from vicious wilfulness, or from inattention and thoughtlessness. In the one case the punishment was too light, in the other too heavy; but as being the easiest way of disposing of the case, was resorted to indiscriminately.

I am glad you have raised these inquiries, and I trust you will obtain the views of abler and more experienced teachers, and let me also know "the best way."

ELEVENTH REPLY.

4. I regard it as absolutely essential that the work laid out for pupils each day should be accomplished by them sometime during the day for which it is assigned. So far as my experience goes, I think those teachers succeed best in bringing about this result who begin by seeing that it is done when they first take charge of a division, and their pupils learn *at first* that what is not done during school hours must be done during the hours of play. Generally when this is a settled fact with pupils the teacher has but little of the after-school work to do. I do not think the very best teachers do a great deal in the way of keeping scholars after sessions when they and their divisions have become well acquainted with each other, but while they are making the acquaintance, I do think more of it is done by good teachers than by others. I do not regard her as a very successful teacher whose pupils never find out just what is expected of them, or, if they do find it, think they can get along just as well by not doing it, or feel that they will keep trying so to do, and, perhaps, succeed a part of the time, and a part of the time are required to do after sessions what they have been let off from doing at other times. Such teachers never bring a room to a good working condition, and are always detaining pupils for work after sessions.

TWELFTH REPLY.

1. During last year most of our teachers kept pupils occasionally, some oftener. The keeping was mostly for discipline.

2. Some detention was made by our best teachers, though, as a rule, they did the least of it.

3. I do not know that those teachers who detained pupils were more successful than others.

4. I consider the practice a good one in special cases. I would guard it to prevent over-doing it on the part of some.

On the other hand, I would be cautious about taking away from teachers an aid to discipline and good lessons which has proved effective in times past, and will, I am satisfied, in times to come.

I receive, with a good deal of caution, some of the modern sentimental notions of school management, and would much prefer a teacher who would insist upon good order and good lessons, even if to secure such she had to make detentions after school hours. I am aware that some believe the keeping of pupils is an evidence of a weak teacher. It may be so. We have a certain number of that kind always amongst us, and most likely will continue to have them. But it seems to me the making of an unyielding rule of no detention out of school hours will rather make such teachers weaker than stronger.

The suggestion made some years ago to require pupils to come to school *before* the opening of the session to make up lost lessons and for discipline I have tried and found not practical.

THIRTEENTH REPLY.

1. Three of my very best teachers do not detain pupils after 12 M. or 4 P. M. Of five who do some are good teachers, none very poor. Three teachers who dismiss classes at 11 A. M. and 3 P. M. do not detain after 12 or 4, but have pupils lose dismissal for misconduct or imperfect lessons, which is virtually detaining them after sessions.

4. I do not like to see it practiced; have asked teachers to avoid it as much as possible, but will not forbid them the privilege of doing so if they wish. I do not think any benefit is derived from detaining after school; it is the only resort for a weak teacher.

FOURTEENTH REPLY.

In reply to your note, I would say in answer commencing with your second question, that pupils were frequently detained by the best teachers, and, I believe, with the most satisfactory results.

Those teachers who detained pupils were more successful than those who did not. The worst failure in examinations last year was the division of a teacher who always found she could leave her school within five minutes after the closing hour of the sessions. I attribute the failure of her classes to the fact that pupils learned that it made no difference whether a lesson was learned or not. Your first question will be answered in my answer to your fourth, because my opinion is based upon the experience and observation of not only last year but of the last twenty years as teacher.

My teachers have always exercised the liberty of retaining pupils for purposes of discipline, making up lessons, etc. I have told them if a teacher found it necessary to detain a whole division frequently, or certain pupils constantly, that something was wrong, and quite as likely with the teacher as with the pupils.

I believe that *after* school is the only proper time for teachers to attend to any case of discipline that requires time, quiet, cool judgment, or tact to settle.

I believe that pupils should be thoroughly impressed with the fact that when a reasonable amount of work is assigned them to do, that this work must be done, if not in school hours then after school. A few detentions ought to be sufficient to convince them when would be the better time to do their tasks.

I have this term five classes averaging thirty pupils each in arithmetic, and my experience with two of these classes will bear me out in my last statement.

I believe those teachers who wish to detain pupils are, almost without exceptions, our most faithful and conscientious ones, and in this desire are actuated by the best of motives, the more prominent being the best interests of the pupils. I never knew a lazy, worthless teacher to keep pupils after school. If there are abuses in the practice, I believe their correction is within easy reach of the principal.

I believe every teacher should be left to accomplish the results which we require, in such manner as her own individuality can best secure them, keeping, of course, within the limits of good common sense and wise discretion.

PRINCIPALS OF GRADED SCHOOLS.

ADAMS COUNTY.

S. F. Hall, Camp Point.
O. W. Colgate, Clayton.
T. N. McCorkle, Mendon.
Mrs. A. K. Scott, Payson.

BOONE COUNTY.

J. W. Gibson, Belvidere.
H. J. Sherrill, North Belvidere.
M. M. Halleck, Poplar Grove.
A. B. Manley, Capron.
M. M. Lewis, Garden Prairie.

BUREAU COUNTY.

C. P. Snow, Princeton.
W. P. Dean, Wyanet.
J. N. Wilkinson, Buda.
J. H. Bates, Neponset.
W. H. Hill, DePue.
R. E. Cutler, Tiskilwa.
J. A. Mercer, Sheffield.
W. H. Robinson, Arlington.
S. C. Whipple, La Moille.
Z. S. Hills, Ohio.
G. P. Peddicord, Walnut.
L. R. Holroyd, Mineral.

CASS COUNTY.

J. Thorpe, Beardstown.
J. A. Johnson, Virginia.
A. Fendleton, Chandlerville.
N. Titus, Ashland.
J. L. Dyer, Arenzville.

CHAMPAIGN COUNTY.

W. H. Lanning, West Side, Champaign.
E. DeBurn, East Side, Champaign.
J. W. Hays, Urbana.
O. C. Palmer, High School, Tolono.
M. E. Moore, Village School, Tolono.
I. N. Wade, Rantoul.
A. D. Sizer, Mahomet.
J. W. Campbell, Homer.
G. L. Pigg, High School, Sidney.
J. W. Watson, Philo.
J. G. Wright, Sadorus.
J. S. Rittenhouse, St. Joseph.
Taylor Clendennen, Ogden.
James Graham, Ivesdale.
J. C. McCauley, Ludlow.

CHRISTIAN COUNTY.

S. Briggs, West Side, Taylorville.
S. A. Moon, East Side, Taylorville.

J. V. Pringle, East Side, Pana.
H. E. Andrews, West Side, Pana.
W. S. Culp, Morrisville.
I. J. Glass, Palmer.
D. M. Gibbs, Rosemond.
J. R. Edmonds, Assumption.
Joseph Miller, Edinburg.
C. R. Spore, Blueville.

CLAY COUNTY.

W. F. Scott, Xenia.
Prof. Connor, Flora.
T. W. Austin, Clay City.
S. Hastings, Ingraham.
T. W. Kexley, Bible Grove.
Prof. T. B. Crisp, Louisville.
W. W. Bewler, Stanford.

COLES COUNTY.

Prof. T. J. Lee, Loxa.
Prof. M. Moore, Charleston.
Prof. Greenlaw, Mattoon.
Prof. F. Boyd, Mattoon.

CRAWFORD COUNTY.

Prof. Pitman, Robinson.
Prof. Stewart, Palestine.
Prof. Widner, Hutsonville.

CUMBERLAND COUNTY.

Mark Sperry, Greenup.
W. B. Robe, Neoga.
J. A. Goodell, Majority Point.

DEKALB COUNTY.

A. E. Bourne, Sandwich.
S. H. Town, Somanauk.
Chas. Curtis, Cortland.
T. S. Dennison, DeKalb.
Samuel Graham, Malta.
W. Whiteside, Sycamore.

DEWITT COUNTY.

R. E. Morrow, Clinton.
J. C. Scullen, Farmer City.

DOUGLAS COUNTY.

E. J. Hoenshel, Tuscola.
L. P. Brigham, Arcola.
W. F. Allred, Camargo.
Allen Waters, Newman.
C. F. Lamb, Bourbon.

EDUCATIONAL INTELLIGENCE.

REPORT OF ATTENDANCE FOR SEPTEMBER, 1876.

	No. of Days of School.	Av. Number Enrolled.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	PRINCIPALS.
Peoria.....	18	.....	3 884	94	977	1 388	.....
Belleville.....	15	1 770	1 603	91	177	908	Henry Raab.
*Rock Island.....	20	1 583	1 393	88	80	649	J. F. Everett.
*Danville.....	20	1 283	1 018	79-3	347	324	C. M. Taylor.
*Alton.....	20	993	799	80	180	346	E. A. Haight.
Moline.....	15	883	831	99	33	630	L. Gregory.
*Morris.....	19	673	549	81	323	211	M. Waters.
Urbana.....	15	633	659	94-5	276	215	J. W. Hays.
*Amboy.....	22	596	517	86-7	180	137	L. T. Regan.
*Sandwich.....	20	493	414	87-8	63	176	A. E. Bourne.
Polo.....	19	489	441	95-3	45	237	J. H. Freeman.
Sterling, 2d Ward.....	20	487	433	95-7	59	256	Alfred Bayliss.
*Wilmington.....	20	453	395	87	123	.....	R. H. Berge.
*Petersburg.....	23	359	350	98	.....	.....	C. L. Hatfield.
Griggsville.....	19	346	303	93	35	176	R. M. Hiltch.
*Forreston.....	20	323	244	86-5	54	61	J. Lawson Wright.
*East Champaign.....	15	273	233	84	35	99	E. DeBurn.
Oregon.....	20	273	234	91	38	146	S. B. Wadworth.
Belvidere, N. Side.....	20	236	213	93	14	113	H. J. Sherrill.
*El Paso, E. Side.....	23	217	186	85-7	147	47	P. M. James.
*Casey.....	23	188	151	83	187	.....	W. H. Brown.
*Newman.....	22	181	131	73	3	30	Allen Waters.
*Walnut.....	20	180	103	84	3	37	G. P. Peddicord.
Huntley.....	23	138	114	93-4	8	61	N. E. Leach.

NOTICE.—These reports must reach us before the 16th of the month to insure publication.

*New Rules.

THE TWENTY-THIRD ANNUAL MEETING OF THE ILLINOIS STATE TEACHERS' ASSOCIATION,

AT CHAMPAIGN, DEC. 27, 28 AND 29, 1876, IN BARRETT HALL.

The Executive Committee are prepared to make the following announcements, and they cordially and earnestly invite all teachers of the State, in all grades of schools and colleges, and all persons engaged in the work of education, and all lovers of knowledge, to attend the meeting, and to participate in the exercises. The following is a provisional arrangement of the programme, and the persons announced have, in nearly all cases, already agreed to do the work assigned.

WEDNESDAY, DECEMBER 27th, 1876. 3 P. M.

Address of welcome, J. W. Langley.

Response, by the president of the association.

Annual address of the president, Edwin C. Hewett, Illinois Normal University.

Business Meeting.

8 P. M.—Barrett Hall—Lecture, David Swing, Chicago.

THURSDAY, DECEMBER 28th—9 A. M.

College and high school section—Barrett Hall.

Report of committee on college and high-school courses of study. Hon. S. M. Etler, H. L. Boltwood, and others.

Grammar and intermediate school section, Presbyterian church, 9 a. m.—How can music be taught in these schools? E. A. Haight, Alton; J. H. Brownlee, Southern Illinois Normal University; Alice Coddington, Champaign.

10:30—Industrial drawing in public schools. P. Roos, Illinois Industrial University; J. Kenia, Illinois Industrial University.

Primary and Kindergarten section, Congregational church, 9 a. m.—Order and methods in primary numbers. Alfred Kirk, Chicago; Carrie E. Campbell, Mattoon; M. L. Seymour, Blue Island.

Discussion by members.

2 p. m., General Association, Barrett Hall.—Methods of study and instruction in natural science. W. B. Powell, Aurora; S. A. Forbes, Normal University; C. Thomas, Southern Normal University.

Discussion by members of the association.

3:30 p. m.—Discussion: What changes are required in the school law? S. M. Eiter, Springfield; B. F. Barve, Geneseo; Charles E. Mann, St. Charles.

8:00 p. m.—Discussion: The duty of the public school in respect to moral education, by J. L. Pickard, Chicago; Newton Bateman, Knox College; Richard Edwards, Princeton; and members of the association.

FRIDAY, DECEMBER 30TH.

9:00 a. m.—College and high-school section—Barrett Hall.

Classifications of science and order in which branches should be taught. R. Allyn, Southern Illinois Normal University; J. V. N. Standish, Lombard University; Principal Block, Jacksonville.

Grammar and intermediate section, Congregational church—

What changes are desirable in intermediate instruction. Alfred Harvey, Paris; G. G. Alvord, Cairo; J. F. Everett, Rock Island; and R. Williams, Farm Ridge.

9:00 Primary and Kindergarten section, Congregational church—

What amusements and instructions are best to secure good habits? H. Raab, Bellville.

11:00—How to make little children truthful. Sue M. D. Fry, Wesleyan University; Mary A. West, Galesburg.

AFTERNOON, 2:00 General association, in the hall of the Illinois Industrial University. Centennial lessons, and report of centennial committee. William T. Harris, St. Louis, Mo.; J. M. Gregory, Illinois Industrial University; S. H. White, Peoria.

Business.

8:00 p. m.—Reunion and addresses.

The Executive Committee have asked the State Centennial Committee to keep at Champaign the matter of the Centennial school exhibit, and have it on exhibition in the University, and we understand that the committee consents to do it.

HOTEL AND RAILROAD ACCOMMODATIONS.

The Doane House \$3.00 per day. The Globe House \$1.75. Headquarters of the Executive committee at the Doane House.

The following railroads will return for one-fifth fare all members who pay full fare in coming, viz:

Illinois Central, St. Louis and Southeastern. The Ohio and Mississippi and the Springfield and Southeastern, will sell tickets to members for 2½ cents per mile traveled. The Indianapolis, Bloomington and Western will sell tickets on membership certificates at 4 cents per mile counting one way. The Toledo, Peoria, and Warsaw will sell excursion tickets to Gilman and El Paso. Other railroads will grant favors, and announcements will be made hereafter.

Membership tickets on which reduced rates will be given can be had on application to W. H. Lanning, Champaign, Illinois.

ROBERT ALLYN,
CHAS. I. PARKER, } *Executive Com.*
W. H. LANNING.

ILLINOIS NORMAL.

The work of the school in all its departments is moving on harmoniously, earnestly, and efficiently. All, with very few exceptions, seem to be happy at their work, and are accomplishing results quite as good as the average in terms past. To be sure, there are some errors in spelling yet, and some are in tribulation in consequence; but the managers of Normal are doing all they can to prevent the continuance of such a state of things. The Grammar Department, under the management of Mr. DEGARMO, is doing excellent work, and Mr. BURRINGTON, in the High School, is working up his *ideal*, namely, to make the High School of the Normal the best place in the state for a preparation for college, or for business. Prof. FORBES is spending all his time in the Museum.—he hears no classes this term.

Our Board of Education, at the July Meeting, passed a resolution opening the Normal to such as might desire a strictly *professional* course, if they were found fit for it. Notice of this action was extensively given in the Catalogue and by circulars; but thus far not a single applicant for this special work has appeared. The Training work, however, is going on with much efficiency.

On Friday Evening, Oct. 13th, Mr. A. P. BURBANK gave a reading for the benefit of the Societies. The night was stormy, but the reader was greeted by a large and appreciative audience. We think Mr. B., on this occasion, excelled all his former efforts here. His growing power is due to his earnest and conscientious study.

Mr. GRAY has succeeded Mr. PALMER as Pastor of the Methodist Church. Mr. PALMER has been appointed Presiding Elder, and will reside in Normal. Prof. H. W. EVEREST, formerly President of Eureka College, succeeds Mr. CONNER as Pastor of the Christian Church. Mr. BEVAN remains with the Baptist Church. The Congregationalists will worship with the Presbyterians, having Mr. McLEAN for a Pastor.

The Trustees of the Baptist Church announce a series of Entertainments for the winter, similar to those given two years ago with so much success. A. H. BURLINGHAM, D. D., of St. Louis, Dr. ALLYN, of the Southern Normal, Dr. EDWARDS and Dr. SEWALL will lecture; Mr. BURBANK will read; and a Musical Concert will fill up the Sixth Evening.

Prof. McCORMICK has recovered from his sickness; he was out of School five weeks.

Miss ALLIE FORD was married to Rev. SAMUEL VAN PELT on the 17th of October.

W. S. MILLS is Superintendent of Schools at Joliet, on the West side of the river; salary, \$1000.

STEPHEN S. SPEAR is Principal of Schools at Golconda, Pope county.

Miss MARTHA FOSTER, a Normal graduate, is Principal of the Graded School in Dexter, Iowa,—salary, \$660 for nine months. She has done considerable work in the Institutes of Iowa.

Miss M. L. SYKES, another graduate, is Principal of the Graded School in Wyoming, Iowa,—salary, \$750 for nine months.

Mr. B. S. HEDGES, of the last class, died at his home in Ogle County, on the 1st of October. His disease was typhoid fever, with which he had been sick ever since his return from the Centennial, some two months ago.

The following resolutions were adopted by the Wrightonian Society:

NORMAL, ILL., Oct. 7th, 1876.

WHEREAS, It has pleased Divine Providence to remove, by death, our brother and co-laborer, BENJAMIN S. HEDGES; therefore,

Resolved, That, in his death, we recognize the loss of a faithful student, a true gentleman, and a devoted Christian.

Resolved, That we tender his relatives the poor sympathy that can be expressed but feebly in this formal manner.

Resolved, That, as a token of respect to his memory, the Wrightonian Hall be draped in mourning during three successive regular meetings.

Resolved, That the Secretary be instructed to forward a copy of these resolutions to the bereaved parent of the deceased; and that a copy of the same be furnished to the ILLINOIS SCHOOLMASTER for publication.

NILAS Y. GILLAN, }
EMMA WING, } Committee.
GEO. FRANKLIN, }

Mrs. ANNA F. ROBINSON, formerly Miss ANNA FULWILER, of Lexington, and who formerly was a student of the Normal, and a resident of Normal, died a few days ago in Lexington.

SOUTHERN ILLINOIS NORMAL.

The first term of the third year began on Sept. 11th. The enrollment to date, Oct. 9th, is 175, somewhat less than for the corresponding date last year, though considerably more than for the first term of the first year. The decrease is alto-

gether owing to a fact, we are glad to chronicle, namely, that under the supervision of Prof. E. C. Ross the public schools of Carbondale are more nearly meeting the wants of the people, and hence are being more generally patronized by its citizens. We have as many students from other places than Carbondale as last year. The 175 above mentioned are distributed as follows:—Normal Department, 109; Preparatory Normal, 51; Model, 15.

The University grounds are vastly improved in appearance since *Arbor Day*. Nearly all of the trees and shrubs, planted by faculty and students on that occasion, are making a vigorous growth, owing, no doubt, to the moist summer. No pains will be spared to make a campus worthy of the noble building erected by the State.

Most of the teachers visited the Exposition, and President ALLYN will lecture to the students on "Lessons of the Exposition." Next to seeing a really great sight is the pleasure of hearing a good sight-seer describe it, so we unfortunates who could not attend, will pay good heed to his remarks. We are glad to know that DR. ALLYN's health is completely restored. Prof. FOSTER has been forced by sickness to be absent nearly a week from his chair, but is again in his place.

We were, as a matter of course, gratified to learn through the papers, that in the award of medals at Philadelphia, Illinois' youngest educational child was not deemed unworthy of one for "Manuscripts, Drawings, etc."

The heating apparatus still vexes our souls, and blackens our ceilings. If it were not that we think it might injure the fair name of The Pioneer Heating Company of Leavenworth, Kansas, which furnished the faulty, detestable thing, we should not hesitate to pronounce said Heating Company a *fraud*.

One of our graduates, Miss WRIGHT, will teach in California this year, owing to bad health. BEVERLY CALDWELL is principal of schools in Hickman, Ky. Miss LIPE assists B. G. ROOTS at Fort Smith, Ark. Mr. Ross has been re-elected to the principalship of Carbondale schools. Many of our students are teaching who expect to be with us in the spring. Mr. L. L. KANE is immersed in politics, and will be with us when the battle is over.

BUSINESS ITEMS.

\$5.00 to \$20.00 per day at home. Samples worth \$1.00 free.

STINSON & Co., Portland, Me.

\$55 to \$77 a Week to Agents. Samples FREE.

P. O. VICKERY, Augusta, Maine.

Send 25 cents to G. P. ROWELL & Co., New York, for pamphlet of 100 pages, containing lists of 3,000 newspapers, and estimates showing cost of advertising.

\$12.00 a day at home. Agents wanted. Outfit and terms free.

TRUE & Co., Augusta, Me.

Those who find "102" opposite their names will understand that their subscriptions expire with this number.

We offer the following special inducement to renew, and to get others to join with you:—For two subscriptions, at \$1.50, we will send, also, the S. S. Teacher, price \$1.50, or the Bloomington Weekly *Pentagraph*, price \$2.00, or any one of the large Chicago weeklies.

The SCHOOLMASTER and any of the four dollar magazines, will be sent for \$4.50, or any one of them will be sent as a premium for six subscribers at \$1.50.

For seven subscribers at \$1.50 we will send Brown's Grammar of Grammars, price \$6.25, or Andrew's Latin Lexicon, same price. The old offers are continued. Specimens free.

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follow p 440.

Then call attention to these at the regular opening exercises, and give, in a few words, the value of industry; then say to the pupils, we shall think of industry all through this day, or, in other words, practice this virtue for one day. It will work charmingly for one day, because of its novelty. Next day take up *order*, remembering, at the same time, that order grows out of industry, and should be carried along with it, so that at the end of the second day we shall have practiced industry two days and order one. The teacher should be willing to keep his own books and desk in order at all times, if he expects the pupils to take any interest in it. If my own desk is full of trash and covered with everything from a hickory twig to a tellurian, I may not ask the children to keep their desks clean and in order, hoping at the same time for success. The *doing* teacher, and not the *saying* teacher, accomplishes most. Many other virtues, perhaps just as important as those given, might be named, as fidelity, purity, chastity, patriotism, friendship, etc., but these will suffice for my purpose. Now, I do not pretend to say that this method is calculated to make good boys and girls in all cases, but I do think it will *aid* the judicious teacher in shaping the lives and destinies of his pupils.

S. W. PAISLEY.

THE RELATIONS BETWEEN THE COMMON SCHOOLS AND THE HIGH SCHOOLS—A PLEA FOR THE HIGH SCHOOL.

W

CONCLUDED.

Again, the full control of education is in the hands of the State. She has assumed the function of teaching. She has established Colleges and Universities, and has founded a good system of common schools. Would it be consistent for her to make this break in the chain? this vast chasm to which the children of the poor may come, and beyond which they may not go? To do so is to stop at precisely the point where the expense to the man in moderate circumstances would compel him to arrest the further progress of his children.

The poor man, who owns a little property, pays his proportion of the tax. It may not be much, but such as it is, it is the same proportion as the rich. Here then over a large and important part of the pupil's life the State would give up its control of educational interests. To the rich man the high school is a matter of complete indifference as far as the education of his children is concerned. To the poor man it is the only means of accomplishing what he desires. We may never fear too many high schools. It is a remarkable fact that the number in our State varies but very little. They

will never increase beyond a good, healthy demand, and this argument against them is hardly worth the breath which is taken to utter it. Therefore, I insist, that to be consistent, the State must demand that this connecting link between the common schools and the colleges be maintained. Take a few statistics, for some arguments, no matter how clearly they may be given, have but little weight unless supported by solid facts—*ex uno disce omnes*. Take the young high school of Evanston, a school of near ninety in number; what does it cost? A little over \$1,800 a year; an average of about \$20 per pupil. Let us send half of these scholars away to a private school, and put the other half to work; one half only will be educated, and how much money will be taken from our village? If we calculate that each one will pay \$250 a year for all expenses, and now a days that is a low estimate, we find that we take \$11,250.00 from our village,—a difference of only \$9,450 in favor of the high school where ninety are educated against forty-five on the other hand. Another view of the case is this: We expend \$1,800 for the school. How many would that \$1,800 support in a foreign academy? About seven, and the balance, the eighty-three, would be left at home with their great treasure, the “rudiments of a common school education.” Stop our high school? Does that seem to be the way to build up our common schools? Does that seem to be the way to make us a free and independent and cultured nation? Now, also, consider the effects our high schools have upon these academies and seminaries in the matter of reducing tuition. Why! I am not sure but that high schools could be defended upon this basis alone, as a matter of public economy. There may not be much difference between the total expense of carrying on an academy and a high school. The difference is always in favor of the latter, but why are they kept so near each other? The answer is self-evident; the academy could not otherwise survive. But just imagine there was no high school. The cost of tuition would rise with fearful rapidity, until rich indeed he would have to be who could afford to give his child this luxury of an education. Another line of statistics will show us the comparative number which enter and graduate from the high school and from the grammar grade of the common school. From two prominent places which I have chosen, I find that the average in the lower grades will be *one* to complete the course to every *four* which enter, and in the high school, *one* to graduate for every *six* that enter. This proportion is as it should be, and is as we would expect it to be; but I firmly believe that the ratio would sink far below that of the high school in the lower grades, were it not for the grand incentive which is exerted by the high school. I urge, then, that the objections to our schools of

secondary instruction are simply objections to our whole system of free, public education.

To the question then, how far should the State undertake to provide for the education of its children at public expense, and is the high school a legitimate portion of a proper school system, we have endeavored to advance briefly these arguments:

1st. The incentives to better work in the common schools.

2d. The preparation of teachers and the argument the better prepared the better work.

3rd. The connecting link between common schools and Universities.

4th. On the score of economy they should be maintained.

In a recent address before the National Association of Teachers, the Rev. Mr. Mayo says: "The people will not heed the clamor against higher education at public expense, that is now on its periodical airing, even in cultivated circles of the North. It is refreshing to see the patient, persistent way in which the whole people move on to the accomplishment of a desirable thing. A foreign observer, shut up with certain classes of worthy people in our great cities, might fancy there was a question before the country, whether the State shall aid in any save the elementary education. But, in fact, the enlightened masses have never wavered an instant on this point. While the President of Harvard University proclaims that the State must withdraw from all save the elementary training for youth, the Commonwealth of Massachusetts, that made Harvard, is preparing to admit a new class of towns to the opportunities of the free high school; is spending liberally on its new normal school of art and its new agricultural college. The State of Maine has established two hundred free high schools during the past five years. Every year the great West is more determined to open every avenue of free, higher culture through the State Universities, the technical, artistic and industrial schools, and the great public libraries that are the real seminaries of the people. This argument is closed. The people have decided that the "sphere" of every American child is the best life possible to him, and nothing is too good for the boy whose vote may elect the President of forty millions of freemen, or the girl who may become the mother of that President."

This quotation is only a specimen of many that I might make. Leading men and eminent educators have expressed similar sentiments again and again. Let us then, fellow-teachers, defend our own work. While we make our schools the best possible, and from time to time show the people the grand result of our labors, the heart of the people will be with us, and all attempts to cripple or maim our grand system of public schools will come to naught.

O. E. HAVEN.

MECHANICAL CALCULATIONS

Perhaps, to most persons, few things will seem stranger than the fact that a machine, or mechanical contrivance, can be made to give the results of calculation. The more difficult it has been to a man to learn arithmetic at school or in practical life, the more inconceivable will it appear to him that a combination of disks, or wheels, can, by natural forces, give results which cost him such mental efforts. "Arithmetic," says he, "takes thinking. Can a machine think?" He is lost in wonder when he reads of Babbage's Calculating Machines, and learns that they give the results of long and complex calculations, such as few mathematicians have occasion to make. *

If uninformed and skeptical, he will, probably, suspect and secretly believe that the relation is a fiction.

Yet everybody is familiar with a calculating machine that works in compound addition; indeed hardly any house is without one. A clock with a second-hand performs addition of seconds, minutes and hours, showing the results on the dial at every instant. Some clocks, generally without a second-hand, show the day of the month and the month of the year, which is as complex a series of additions as can be made in the table of time. But these machines are to show results arising from the slow addition of units, and do not seem to account for multiplications, calculations of squares, cubes, etc., and of logarithms. I do not propose to explain what I do not profess to know, the construction of Babbage's machine; but I will show how simple additions, readily-comprehensible, may give series of numbers, especially of squares and cubes, which are viewed ordinarily as the results of multiplications only. If we can make cubes by addition more easily than by multiplication, we can conceive that a machine which works like a clock, by additions, can do the same work.

If one wishes to make a table of square numbers, he will naturally begin to multiply, 2×2 , 3×3 , 4×4 , and so on. After he passes 33×33 , his work becomes laborious. Now, if each square can be made the step to the next one, and if we can step from one to another by a simple addition, the labor is saved. Beside, we secure this advantage: that if an error is made in the addition at any point, it will be easily detected at the successive tenth terms, 10^2 , 20^2 , 30^2 , 40^2 , and so on; but as the several multiplications would be independent, an error in them is not easily seen.

*See an article in *Harpers' Magazine*. Vol. XXX, December, 1864.

Write a line of the first square numbers; under these, put their successive differences; and under these the differences of the differences, thus:

1	4	9	16	25	36	49
3	5	7	9	11	13	
2	2	2	2	2	2	

The first line of differences, that is, the differences between successive squares, is the series of odd numbers, which themselves differ by 2. It follows, that if we add the series of odd numbers, we shall have at each step one of the series of squares, thus:

$$1+3+5+7+9+11+13+15, \text{ etc.}$$

$$2^2, 3^2, 4^2, 5^2, 6^2, 7^2, 8^2, \text{ etc.}$$

Under each term of the series is written the square produced by the addition of all the preceding terms. If, then, a machine can be made to increase its successive additions in this way, it will give the series of squares; and if any one wishes to reach the same results quickly, he will do it as the machine would. Another way of setting the numbers is this:

$$\begin{array}{ll} 2^2=1+3=4 & 5^2=16+9=25 \\ 3^2=4+5=9 & 6^2=25+11=36 \\ 4^2=9+7=16 & 7^2=36+13=49 \end{array}$$

But the same results may be reached by other series, less convenient in practice, but worth noting as showing in how many ways the results of multiplication can be reached by addition. The series of numbers to be added which we took increased by 2; but we may use an additive series increasing by 4, by 6, by 8, or by any other even number; for example, the first column shows differences of 4, (8, 12, 16, etc.); the next, differences of 6, (15, 21, 27, etc.); the others, differences of 8 and 10:

1+8=9	1+15=16	1+24=25	1+35=36
4+12=16	4+21=25	4+32=36	4+45=49
9+16=25	9+27=36	9+40=49	9+55=64
16+20=36	16+33=49	16+48=64	16+65=81
25+24=49	25+39=64	25+56=81	25+75=100
36+28=64	36+45=81	36+64=100	36+85=121

With a little calculation, we may start a series with any desired difference, thus: Let the difference be 100; divide it by 2; result, 50; add 1; result, 51; 51^2 is the starting point, as thus: $1+2600=2601=51^2$; $4+2700=2704=52^2$; $9+2800=2809=53^2$; and so on.

Now, how shall we make a table of cubes by the additive method? As before, ascertain the successive differences, till we find that the line consists of the same number all the time, as thus:

Cubes :	1	8	27	64	125	216
1st dif.		7	19	37	61	91
2d dif.			12	18	24	30
3d dif.				6	6	6

The first line gives the cubes, from 1^3 to 6^3 ; the next, their differences; the next, the differences of the differences; and at the next step we get the ultimate difference, 6; in the table of squares, we had only two lines of differences, and the ultimate was 2. As we added 2 before, we must now add 6 successively; but, as it is easily done in mind, we need not make a column to add it in, as would be necessary in calculating higher powers; for this ultimate difference becomes, successively, 2, 6, 24, 120, 720, etc. We set the work in two parallel columns, the first of which prepares increments for the second:

Col. I.	Col. II.	Col. I.	Col. II.
1		(brought up.)	
+ 6	1		216 = 6^3
<u>7</u> + 7	<u>8</u> = 2^3	127 + 127	<u>343</u> = 7^3
+ 12	19	+ 42	<u>169</u> + 169
<u>19</u> + 19	<u>27</u> = 3^3	+ 48	<u>512</u> = 8^3
+ 18	37	+ 54	<u>217</u> + 217
<u>37</u> + 37	<u>64</u> = 4^3	+ 60	<u>729</u> = 9^3
+ 24	61	+ 66	<u>271</u> + 271
<u>61</u> + 61	<u>125</u> = 5^3	+ 381	<u>1000</u> = 10^3
+ 30	91	+ 397	<u>331</u> + 331
<u>91</u> + 91	<u>216</u> = 6^3	+ 1728	<u>1331</u> = 11^3
+ 36	127		+ 397
<u>127</u> + 127			
(carried up.)		&c., &c.	1728 = 12^3

From this point onward, the calculation can be carried on by this method very much more rapidly than by multiplication, and, as shown before, with greater security from error.

Perhaps those who have followed us thus far can for themselves, if curiosity leads them on, prepare the four columns desirable to calculate 4th powers; but we stop here. Our object has been to show how those who have occasion may most easily make such tables of powers; to show how such results are conceivable as the products of machinery; to point out some of the less familiar properties of the numbers; and to stimulate, perhaps, curiosity and investigation in a field where the curiosity of one day may suggest the practical method of another.

SAMUEL WILLARD.

STATE EXAMINATION.

(1876.)

GEOMETRY.

(Time, 90 Minutes.)

1. Define polyhedron, prism, cube, and discriminate between a spherical sector and a segment.
2. What is the sum of the interior angles of any polygon? Prove it.
3. Find the ratio of the side of a square to its diagonal.
4. Show how to inscribe a circle in a triangle, and deduce a rule for finding the area of a triangle when the three sides of the triangle and the area of the inscribed circle are known.
5. How is the area of a spherical triangle measured? State without the proof.
6. A ball of lead is three inches in diameter; what is its weight? A cubic foot of lead weighs 712 pounds avoirdupois.
7. State and demonstrate the relation of the radius to the side of an inscribed equilateral triangle.
8. Give the demonstration, that you consider the best, to prove that the square described on the hypotenuse of a right angled triangle is equivalent to the sum of the squares of the other two sides.
9. Draw a diagram illustrating all the relative positions of two circumferences.
10. The solid generated by a circular segment revolving about a diameter exterior to it is equivalent to one-sixth of the cylinder whose radius is the chord of the segment and whose altitude is the projection of that chord on the axis. Demonstrate.

CHEMISTRY.

(Time, 80 Minutes.)

1. Define matter and force. Mention some of the physical properties of matter. What are physical changes in matter? Mention some of the forces chiefly concerned in modifying the physical properties of matter, called physical forces.
2. What is the specific gravity of the lightest known substance, also of the heaviest known substance? About how many times as heavy is a bulk of the latter as of the former?

3. Give a definition of crystalization. Mention two amorphous bodies.
4. State a proof that heat is a mode of motion.
5. State some of the discoveries that are the result of spectrum analysis. In the manufacture of what is the spectroscope used?
6. State and illustrate the law of multiple proportions.
7. Compare the atom and the molecule: make the distinction between them clear.
8. Give, in full, theory of acids, bases and salts.
9. Explain the usual method of preparing H. H. Represent by symbols the reaction.
10. Give the symbol for calomel; for corrosive sublimate; for glycerine.

PHYSIOLOGY.

(Time, 60 Minutes.)

1. Name, locate, and explain the use of, the bones of the face.
2. How many bones in the hand and wrist? Name and locate them.
3. What are the muscles? their office? Name two of the principal muscles of the arm, two of the trunk, two of the leg.
4. What is the office of the skin? of what is it composed? Explain how one becomes tanned—how freckled.
5. Of what are nails and the hair modified forms? Explain the manner of growth.
6. Tell what you can of the teeth.
7. Explain the process of respiration.
8. What is the voice? Name and locate the principal organs by which it is produced.
9. Describe the circulation; name and locate the largest vein in the body; the largest artery.
10. What constitutes the nervous system? What are the nerves and their office?

DIDACTICS.

(Time, 40 Minutes.)

1. Prepare a course of study for a graded school of eight grades below the high school.
2. Prepare a four years' course for a high school.

3. Do you favor monthly written examinations? Give reasons for or against.
4. Explain your system of records and marking, and give reasons for keeping and using same.
5. In preparing a time programme for a given school, what consideration would influence you in assigning the time for study, also the time for recitation?
6. What and how much "oral instruction" would you advise for primary classes?
7. Give an outline of the plans and methods of the schools for infant pupils, known as Kindergartens. Your reasons for or against their utility.
8. Give a list of all "General Exercises" used by you in school work.
9. State your general arrangements for order in connection with your own school.
10. Indicate your methods of securing punctuality and regularity of attendance.

BOTANY.

(Time, 60 Minutes.)

1. Classify buds, and define each kind.
2. How is the plant related to the mineral kingdom, and how to the animal kingdom?
3. How does an herb differ from a shrub?
4. Of what does the fruit of the strawberry consist?
5. Describe the growth of a plant from germination to maturity of its seed.
6. Describe the structure of an exogenous woody stem of one year's growth.
7. What are the living parts of a tree?
8. Name, describe, and give the office of the different layers of the bark of a tree.
9. How does a one-celled simple differ from a one-celled compound ovary?
10. Represent, by a simple diagram, a cordate, petiolate, stipulate, serrate, and pinnate-veined leaf.

TO THE TEACHERS OF ILLINOIS.

I want to say a few words to my fellow-teachers of this State, about their relations to the Normal School and its relations to them. In these times, to say the least, all our teachers, of whatever grade, and all our systems of education, and all our educational institutions, of whatever name, should act in perfect harmony. To use a slang phrase, "We are all in the same boat;" we have essentially a common aim; we are all parts of one whole; we have common friends and common enemies. We need to stand together, and to support and help each other.

The sole aim and purpose of the Normal School is to prepare teachers for the schools of the State. This we are doing as well as the appliances at our disposal and the materials furnished to our hands will permit. But, when our teachers are once prepared with more or less of completeness, and are sent forth from us, they join the great body of their fellows now in the field. There, they and the rest must be tested solely by the work that they do—they stand on a perfect equality with all others. If they wholly or partially fail, they should be judged with no greater leniency, certainly, because they have been members of the Normal School. If they succeed, their success will be a help to all their neighboring teachers, and to the general cause of education. And, if their success is due in any measure to their training at the Normal, then so far is the Normal a help to all who are helped by that success.

At the last meeting of the State Board of Education, a rule was adopted allowing any teacher of the State, who can pass a satisfactory examination before the Faculty of the Normal University, to enter this Institution for a year's course in *strictly professional* study and practice. Any who avail themselves of this privilege, and do satisfactory work, will be granted a certificate. To such teachers as are tolerably well prepared in the *matter* of school education, but feel themselves deficient in respect to the *manner*, this is a rare privilege. With our regular class-work in Theory and Art of Teaching, and in the History and Methods of Education, together with the opportunities for observation and practice in our model school, and an active participation in the meetings and critical exercises of our Teachers' Class, we are sure that we can do for such teachers a great deal to prepare them for better work in the school room. It would seem that a large number ought to respond to this offer; but thus far the results are not very encouraging.

We desire that *all* the teachers of the State, whether they have ever been students here or not, should feel that they have a sort of citizenship in the Normal,—that it is, in some sense, their home. All such teachers who can make us a longer or a shorter visit, may be sure of a hearty welcome. If they can come to spend a few days or a few weeks, without becoming members of the school, we shall be glad to give them a place as observers in any of the classes or departments of the Institution. And we believe that, with our very full and excellently arranged Museum and Laboratory, with our classes of almost every grade in almost every study of our public schools, with our corps of teachers ready to answer all queries as far as they may be able, we can make the visits of earnest teachers both pleasant and profitable. We are frequently favored with visits of this kind; but we hope to see them multiplied ten-fold. This Institution exists solely for the good of the schools of the State, and we are anxious to do all that we can to promote that good in every way.

Fellow-teachers, we have a noble work,—a delightful work; yet it is a difficult work, and one beset with many obstacles. Let us all “pull together.”

EDWIN C. HEWETT.

Normal University, Normal, Nov. 10, 1876.

ADVICE TO BEGINNERS.—IX.

As stated in the course of study of the first grade, the language work should consist of such exercises as pertain to the thorough teaching of the former subjects of the grade.

This article is intended principally to suggest to you what such exercises should be.

Have your pupils orally form many telling sentences, from words of your chart, as you point to them. You may call it story-telling at first. Let this work be done by pupils individually and in concert.

Some of the sentences may be formed of the words of the chart, as follows:

A large man saw the white pig.

The good boy can run in the lot.

John sees Henry in the house.

The black cow eats the good hay.

When your pupils can readily do this, have them individually form sentences, by pointing to words and reading them. Sometimes, as one points

out the words, let the others of the class read them in concert. Sometimes let the pupil select one out of the class to read his story.

When this work is well done, teach them the definition of a sentence, and make them understand the meaning of the definition.

Show them that all the sentences they have formed have been telling sentences, and teach the definition of telling sentences.

Have them take their First Readers, to find that every sentence commences with a capital, and that every telling sentence ends with a period.

Impress these facts very forcibly upon their minds, and continue the practice, requiring the pupils to find in advance, by observation in their Readers, the forms and uses of many of the things to be taught in this subject.

Next, write practical sentences upon the black-board, to be copied and completed by the pupils, upon their slates. Teach them the form, name and use of the dash in this connection. The sentences you place upon the board may be as follows:

A fat — eats hay.

The small — sees the black —.

The white — can run in the —.

John is a good —.

Then have them write upon their slates many telling sentences, composed of words found on the chart. Mark their work carefully, and place the incorrect sentences upon the board for criticism by the class. Require reasons from the pupils for their corrections.

In this criticism work, teach your pupils that all proper names should commence with capitals, and that the word I should always be a capital. Take time to make them understand what is meant by a proper name.

Sometimes give the class a certain number of minutes to find who can correctly write the greatest number of sentences, each containing not less than a certain number of the words of the chart.

When you have taught thoroughly what has already been suggested, teach your pupils in the same manner the asking sentence. Show them the right way and the wrong ways of making the question mark, and show them its position upon the line upon which the sentence is written. Give much attention, in due time, to the formation and position of all of the other characters to be used by the pupils. Spend as much time as is necessary for the development of the asking sentence.

Give the class certain words of the chart, requiring each word to be placed by each pupil in a sentence, of each kind, and may be taught, as follows (James and pig being the given words):

James sees a large horse.

Do you see James in the house?

The white pig is in the lot.

Can a pig eat hay?

Next, teach the commanding sentence, show that it is followed by a period, and be so thorough in your work that the pupils can distinguish this sentence from either of the two kinds already taught, and can readily place any given word of the chart in an original sentence of any one of the three kinds, as called for.

In like manner, teach the exclaiming sentence, the exclamation mark, that the word O is always a capital, and secure like results.

Have the written work neatly done, upon lines, with proper margins, etc.

In order, as required by the lessons of the Reader, teach the pupils abbreviations, with the word for which each stands, that each should be followed by a period, and place them, as fast as taught, upon your chart of words; the apostrophe, with uses in denoting possession, and in forming contractions; quotation marks, their formation and use; the hyphen, its use at the ends of lines in separating the syllables of words, and in connecting the parts of compound words; the comma, with some of its simplest uses, as separating all but the last two of consecutive words used in like manner, following the name of a person addressed, etc.; and the forms and most common uses of the colon and semi-colon.

Teach them that the names of animals and objects, personified, should commence with capitals, and that every line of poetry begins with a capital.

As the pupils use their Readers, keep their eyes open to the uses of capitals and all marks contained in their lessons.

Sometimes dictate to them one or more paragraphs of their Reader, and after they have written the same upon their slates, let them take their books to see who has made the fewest errors of all kinds. Place the common errors of their conversation, as "I done it," "We seen her," "We and him ran," etc., upon the board. Let them remain there a considerable time, and encourage them to avoid such expressions, and to criticize each other in the use of them.

In the giving of definitions and in the making of statements, have the pupils give complete sentences.

Have pupils talk much of their reading lessons. Sometimes have them stand one by one in front of the class and tell all possible of the lesson read, the others making corrections and giving the omissions. Sometimes

read stories to them, and then call upon them separately to stand facing the school, and to tell what they can remember of them. Sometimes time them, to see who can talk the longest about the lesson or the story you have read to them. Have them, at times, stand facing the school and tell all they know about birds, cows, dogs, cats, flowers, plays, visits, travels, etc., having pupils correct any errors they may notice.

Let the object lessons you give them pertain to the work of their Reader for the development of their powers of observation, and conversation upon such subjects as will assist them in their daily work, whether this object work be upon form, color, parts of the human body, flowers, birds, or any other of the many subjects that will be brought to your attention.

For your work in drawing get some published work upon the subject, study it carefully, and give such a part of it to this grade as is adapted to their needs and capacities.

Make your pupils' work in printing of a character to enable them to know the differences between the script and print letters, and to readily make the print letters. Do not teach your pupils to print until after they have learned to write; and after they have learned to print, frequently give them assigned lessons in this work, but have them do much written work every day.

You may think I have mapped out a large work for a First Reader class to do in language; but try it, and I think you will become satisfied that such pupils can easily learn many things that are now unknown to many who are teaching in our schools.

There were several errors in the printing of my last article, but I think you will generally understand what was meant, without my taking time to make corrections.

E. L. WELLS.

EDITOR'S DEPARTMENT.

With the present number this journal completes its twenty-second year, and, like many another twenty-two-year-old, it has concluded to exist as an individual entity no longer. In other words, *THE ILLINOIS SCHOOLMASTER* herewith makes its best bow to its numerous audience and retires behind the scenes. Lest it should be inferred that it has followed the too common fate of many of its predecessors, it hastens to remark that the outlook was never more encouraging, nor any portion of its history more prosperous than the year of grace eighteen hundred and seventy-six. It has always paid its bills and left a fair compensation for the labor performed upon it. Its friends have strangely multiplied. Its enemies, never numer-

ous, have become neutrals or allies. That it has a large advertising patronage is proved by a glance at the "Advertiser." Why it should, like Mr. Weller's valentine, make so sudden a "pull up," is explained herewith. On the twentieth of the present month, the first number of an educational weekly will issue from Chicago. THE SCHOOLMASTER and six or seven other Western journals have united forces, and we congratulate the educational people of the West upon the fact. The reasons that have led us to the surrender of our field may be briefly stated.

The educational journals have been a potent force. To the toilers remote from the searching eye of supervision they have come with words of instruction, criticism and cheer. To this class has THE SCHOOLMASTER tendered its best thoughts and fullest experience. Its pages have been filled by articles from practical workers in the common schools. But these teachers work but five or six months of the twelve. The journal coming to their hands but once a month, has been able to do but a small portion of what it should. When questions like the following have come to us, we have almost longed for a *daily*, if such a thing were practicable: "When are we to have the rest of that common-school course?" "Those articles are good, but can't they come faster?" "I began to take your journal, but my term of school was out before I could introduce the reforms you urge; cannot we have a weekly?" These and kindred expressions have not been uncommon. Whatever of good the monthlies have accomplished can be quadrupled by a weekly. The only possible objection to such a paper is the price, and the class who are least inclined to spare from their meager earnings the price of the monthly, can have, for the same price, the weekly during the working months of their year. Indeed, the monthly loses a large part of its power upon a majority of its readers, because it comes to them at a time when they are not prepared to use it.

What is said respecting the district-school teachers is true, only in a smaller degree, of all others. These, and many other considerations, cause us to hail with pleasure the advent of the new journal. It will be in shape the same as *The Nation*, will contain sixteen pages, and will be under the editorial charge of Prof. W. F. PHELPS, widely known as the president of the National Teachers' Association, the former principal of the Winona, Minnesota, Normal School, and the present principal of the White-water, Wis., Normal School. He will be assisted by Prof. E. OLNEY, the well-known author, of Ann Arbor, and one or two others, not yet designated. The various states will be represented by state editors, who will make a specialty of educational intelligence, but will not be limited to that. Illinois will have abundant space allotted exclusively to her interests, and the present editor of THE SCHOOLMASTER will be in charge of that department. A few expressions of opinion from well-known schoolmen of the West are appended:

S. R. Winchell, Milwaukee, Wis.:

DEAR SIR:—Wishing you all success in a worthy enterprise, and assuring you of such assistance as I can render toward its firm establishment, I am, etc.,

J. L. PICKARD.

I am glad to hear that you expect to enlarge your borders. I shall cheerfully contribute when I can.

W. C. SAWYER.

I see nothing but success in your enterprise; and I know you will win it if labor and intelligent zeal will do it. EDW. OLNEY.

I fully endorse the idea of consolidation, and am glad that you are going to bring it about. May success attend you in your enterprise. S. H. WHITE.

The following has been received:

John W. Cook, Normal, Ill.:

DEAR SIR:—I am gratified to learn of the plan proposed by the managers of the school journals in the Northwest, to unite them and issue a weekly periodical. By thus concentrating the editorial ability of the several independent journals upon one possessing the excellences of all, and from which their defects are carefully eliminated, the result must secure a pronounced character and influence for school journalism in the Northwest. I most cordially commend the undertaking, and have no doubt that business as well as professional men will appreciate the great advantage of an issue of this character, weekly instead of monthly.

Very respectfully yours,

S. M. ETTER,

Sup't Public Instruction.

A great number of letters of similar tenor have been received; among the writers are Dr. NEWTON BATEMAN, ALEXANDER WINCHELL, JOHN BASCOM, president Wisconsin University, W. W. FOLWELL, president Minnesota University, EDWARD SEARING, Superintendent Public Instruction, Wisconsin, ALONZO ABERNATHY, president Chicago University, and J. B. ANGELL, president Michigan University.

The publishers are S. R. WINCHELL, of Milwaukee, the editor and publisher of *The Northwestern Journal of Education*, and Prof. W. L. KLEIN, principal of schools at Woodstock, Illinois

The price will be two dollars and a half a year, one dollar and a half for six months, and further reductions for clubs. We are authorized to receive subscriptions. Our patrons will receive, for their unexpired terms, the new journal for two-thirds of the time for which they would have received *THE SCHOOLMASTER*,—a substitution that is obviously generous. Several hundred subscriptions expire with the present number. Will you at once renew, sending the full price of weekly, or such amount as you see fit, and have your names at once entered for the coming year? Address the editor of *THE SCHOOLMASTER*, Normal, Ill.

In closing the publication of our Journal we have many regrets. The work has been no holiday task, when added to the daily labors of the classroom. To our many friends we return sincerest thanks. Whatever success has been achieved has been due to their generous aid. Will they continue the good work? We want news items, hints, articles, and, most of all, subscriptions. The county superintendents hold success in their hands.

To the book publishers, who have made a school journal a possibility, we cannot say all we would. Their aid has been of that material character that puts words to shame. Teachers, you know who they are. See to it that they lose nothing by their patronage

ILLINOIS TEACHER,
Volume XXII.

THE

{ CHICAGO SCHOOLMASTER
Volume IX.

ILLINOIS SCHOOLMASTER.

A JOURNAL OF EDUCATIONAL LITERATURE AND NEWS.

VOLUME IX.

DECEMBER, 1876.

NUMBER 103.

THE ILLINOIS COLLEGE.

Illinois College is, in many respects, singularly fortunate in its location. Jacksonville is a beautiful, half rural city, of twelve thousand people. Beyond any other city of equal size it is adorned by fine church edifices, and by large public and educational buildings.

In 1829, before any college had been established in the State, Illinois College was founded here. It became the nucleus around which clustered the Jacksonville Female Academy, Illinois Conference Female College, and later, the Young Ladies' Athenæum and Illinois Conservatory of Music. The Trustees of the College have also, under their control, Whipple Academy, and Jacksonville Business College. At an early day, such character was given to the place that it was selected as the home of the great charitable and educational institutions of the State, for the insane, for the deaf and dumb, and for the blind. In the midst of these schools of literature, science, art, and commerce, Illinois College is surrounded by most favorable social influences.

The College campus is a beautiful inclosure, of about twelve acres, on College Hill, at the west end of the city. It is elevated ninety feet above the general level of the highly cultivated farms of rolling prairie around it, and is unsurpassed for healthfulness.

The College buildings are shown, some of them poorly, in the accompanying cut. They are in good repair, well warmed and ventilated, and well adapted to the uses for which they were built. The original building, erected partly in 1829 and partly in 1830, is now occupied by the halls and libraries of the two literary societies, the Sigma Pi and the Phi Alpha, by the College Library, the Cabinet of Natural History, and the Greek recitation room.



ILLINOIS COLLEGE.

College Hall, built in 1856, contains the chapel, six recitation and lecture rooms, and the apparatus room.

The Dormitory Building, completed in 1874, contains twenty-eight suites of rooms, with excellent accommodations for fifty-six students. The rooms are heated by steam and lighted by gas. Each study-room is furnished with a large study table, and each bed-room with a woven wire mattress bed.

The Janitor's Cottage and the Club-House are the only other buildings on the campus.

The building erected for Whipple Academy, now occupied by the Business College, is three-fourths of a mile from the College, and near the business center of the city.

The Philosophical and Chemical Apparatus is extensive, and adequate to full courses of experimental lectures. The College Library contains eight thousand volumes, and the Society Library about three thousand more. A Reading Room, free to all, is maintained by the members of the Sigma Pi Society. A very creditable beginning has been made in the Cabinet of Mineralogy and Natural History.

These are the externals of Illinois College. They present a goodly appearance, but it is hoped that soon other buildings will adorn the campus, and additional appliances serve the uses of scientific education.

The first Board of Trustees was elected December 5th, 1829, at a meeting held in the first College Building, then nearly finished. This meeting represented two separate efforts in the cause of the higher education. One of these efforts originated in the christian zeal and public spirit of a few individuals residing in Illinois, prominent among whom were Rev. JOHN M. ELLIS, Rev. THOMAS LIPPINCOTT, Col. THOMAS MATHER, WILLIAM COLLINS, Hon. SAMUEL D. LOCKWOOD, JOHN P. WILKINSON, and WILLIAM C. POSEY. Of these the three last named were elected trustees. The remaining seven of the original trustees represented an association of theological students in Yale College, who had resolved to make some one of the north-western states their future home and the field of their evangelical labors. Becoming acquainted with the plans of Mr. ELLIS and his friends, they agreed to unite with them in founding Illinois College at Jacksonville, and to furnish, through their eastern friends, \$10,000 in aid of the project. Their names were THERON BALDWIN, JULIAN M. STURTEVANT, MASON. GROSVENOR, JOHN F. BROOKS, ELISHA JENNEY, WILLIAM KIRBY, and ASA TURNER.

Application for a charter was made to the legislature in the winter of 1830-31, but a charter was refused, on account of prejudices then existing

against institutions with educational, charitable or religious aims. Four years later the application was renewed, and at this time the friends of Illinois College were joined by those who had just founded Shurtleff College, at Alton, and McKendree College, at Lebanon. Like charters were granted to all at the same time. The names of JOHN G. BERGEN, JOHN TILSON, and GIDEON BLACKBURN were added to the trustees of Illinois College.

It is natural that the character of an institution of learning should be determined by the spirit and aims of its founders. ~~They~~ were men of the purest piety and patriotism. They were trained under the social and educational influences of New England. They regarded learning as the hand-maid of religion, and the christian religion as the most efficient promoter of learning. They intended that Illinois College should do for Illinois what the colleges of New England have done, are doing, and are destined to do for her. But neither had they, nor have their successors, ever had any thought of making the college an instrument of denominational propaganda.

Those who co-operated in founding Illinois College, and in sustaining it during the early years of its history, attained greater usefulness than commonly falls to the lot of man. They were among the foremost of those strong men who gave such character to the then rising State. THERON BALDWIN, D. D., was the first Principal of Monticello Female Seminary, and was largely instrumental in founding it. He was afterwards, for many years, Secretary of the Society for the Promotion of Collegiate Education at the West. Rev. MASON GROSVENOR, after a long life of varied usefulness, now gives a portion of his time to the College of which, in his youth, he was almost the originator, as Professor of Moral Philosophy. EDWARD BEECHER, D. D., was the first President. Appointed in 1832, he resigned in 1844. His ability and his history are well known to the American public. J. M. Sturtevant, D. D., LL. D., was the first instructor in Illinois College, and has spent his entire life in its service. He is well known throughout the country as a man of purest life, of vigorous and independent thought, and of eminent ability. To his unwearied efforts and self-sacrificing devotion, the College owes very much of what it is and of what it may become in the future. He was appointed President in 1844. Having resigned that office in June, 1876, he still renders most valuable service as instructor in studies of the Senior Class. Early associated with him in the work of instruction, were SAMUEL ADAMS, A. M., M. D., a man of great learning and worth, still ably filling the chair of Chemistry and Physics ;

HENRY M. POST, D. D., now Pastor of the First Congregational Church of St. Louis, and J. B. TURNER, now so well known as a leading agriculturist and reformer.

These men, both trustees and faculty, were wise master-builders. They and their associates laid well the foundations of the present and future greatness of the State. To them is largely due the pre-eminence which Illinois has long enjoyed among her sister states of the Northwest. And no small part of their work was done through Illinois College. Her students and graduates, in all parts of Illinois, and in many instances in neighboring states, have been leaders in thought and action, both in church and civil state. Hon. RICHARD YATES, the first graduate, as a most patriotic and efficient Governor during the war, won laurels for himself and great honor to our Commonwealth. NEWTON BATEMAN, LL. D., for eight years Superintendent of Public Instruction, did more than any other man for our noble system of public schools, and is now the second of the graduates of Illinois College to become President of Knox College. But space will not permit even the mere mention of names to show how much the College has done to make Illinois what it is. The good work already accomplished would amply repay its friends for all their labors and self-sacrifice in its behalf.

But the College has not yet completed its first half century. The best of our American colleges have not been the creations of a day. They have had their origin with the communities in which they were founded. They have often struggled for existence while material prosperity was being developed around them, until accumulated wealth should flow into them. This College is no exception to the rule. With the struggles of the past we are now concerned no further than to know that they are safely passed, and that future prosperity seems well assured. Aside from grounds, buildings, and other appliances, the invested endowment fund is about \$110,000, with from \$10,000 to \$15,000 available in the future.

The present faculty consists of seven earnest, faithful men, each of marked ability and experience in his department, fully alive to the increasing demands of the times upon those who would be found worthy to represent the higher culture.

The standard of attainment for admission to the Classical Course is not so high as in Yale or Harvard, but it is the same as in the majority of Eastern colleges. The work of instruction is done entirely by Professors, and throughout the whole course the students come into close daily contact with teachers of experience and of enthusiasm, who take a friendly personal interest in their pupils. Habits of good order and industry prevail, and

cases of serious discipline are extremely rare. The Faculty regard it of prime importance to maintain a high standard of scholarship. The student is required to pass thorough examinations, for the most part written, on all the studies required for graduation. The graduates of Illinois College, in respect to mental culture and intellectual ability, do not suffer in comparison with those of the older Eastern colleges.

THE SCIENTIFIC COURSE.

The true American college seeks to lead public sentiment in all matters pertaining to education. It would be very gratifying if all who desire to avail themselves of the advantages of the College could be induced to pursue, in full, the Classical Course. But in a country still comparatively new, there are many young men who have not time and means for such an education. They want the best education they can get in three or four years. In none of our high schools or academies can they enjoy the benefits of a faculty of experienced teachers, of apparatus, and other appliances that are found in the college. To meet the wants of these, our Scientific Course is a necessary and useful adaptation. For admission, the student is examined in the common-school studies, and in Algebra to quadratics. The course embraces all the studies of the Classical Course, except Greek. It includes three years' instruction in Latin, and adds special studies in History, German, Geology, Meteorology, and the Higher Mathematics. Physics are taught by recitations and full courses of lectures. It is in contemplation soon to require for admission, Physical Geography, four books of Geometry, and one year of Latin.

WHIPPLE ACADEMY.

Every Western college finds a Preparatory Department a necessity. In 1869, Dr. S. L. WHIPPLE founded the Academy, by a donation of \$10,000. At present it is carried on in the College Buildings, with a separate Study Hall, and with a Principal whose whole time is devoted to its care. He is assisted in the work of instruction by some of the College Faculty, who hear recitations, each in his own department.

The Jacksonville Business College and English Training School is owned and controlled by the Trustees of Illinois College. It is conducted in the building formerly occupied by Whipple Academy, near the center of business of the city. It has a separate faculty of four men of the best qualifications for their work. For those wishing an English or Commercial Course of from six months to two years, it offers advantages not to be found elsewhere.

The College Club, for the boarding of students who room in the Dormitory, is an exceedingly well-managed and successful part of the College machinery. The dining-room is pleasant, the tables well furnished, and good board is had for \$2 to \$2.25 per week.

The entire annual College expenses of a student who rooms in the Dormitory, for board, tuition, room-rent, fuel, gas and text-books, are less than \$175.

The Faculty seek to pervade the entire Institution with a strong moral and religious influence—utterly free, however from all sectarian bias. All students are required to attend morning prayers and the Sabbath afternoon lecture. This is conducted by Dr. STURTEVANT, whose pungent and powerful discourses produce lasting impressions. A weekly prayer-meeting is maintained by the students.

Such is a very imperfect sketch of the past and present of Illinois College. It commences this, the forty-eighth year of its existence, with very encouraging numbers and prospects. The Sophomore Class numbers twenty-four, the Freshman thirty-two.

EDUCATING INFLUENCE OF SCHOOL LIBRARIES.

The best safeguard against corruption in office, unwise legislation, and all the unwholesome effects attendant thereon, is an intelligent people. Whether the people may be rendered more intelligent by the study of Greek and Latin classics than by the perusal of English literature is a question which it is the duty of the educators to solve. Allowing that the attainment of a higher standard of citizenship is one of the prime reasons for the governmental establishment of common schools, we must at once concede to school libraries an important influence in the accomplishment of that purpose.

He, who, by a brilliant course in school and college, acquires a finished education, qualifies himself for an advanced order of usefulness; but if, upon the attainment of that education, he neglects to gain, by a constant course of reading, some general information such as is not taught in the schools—and this neglect prevails among college graduates,—his usefulness is materially impaired, and in lieu of becoming a benefit to his country and an ornament to society, he remains as a significant monument to the imperfections of our educational system. From this we are led to conclude that culture, without a taste for information, is less to be desired than

a taste for reading, without trained accomplishments. Again, a course of miscellaneous reading serves to develop a measure of judgment, which is a great desideratum in the body politic of a Democratic government like ours; while the method of instruction pursued in many of our Academies of learning serves but to stultify the judgment which, under other circumstances, might be rendered accurate and discerning.

It is argued by some that much miscellaneous reading injures the faculties of application in such a manner that volition is destroyed, and all efforts to attain proficiency in collegiate studies prove unavailing. But even were this the case, which we do not grant, how small would be the proportion of those injured to those benefited? What percentage, we would ask, of the attendance at our common schools, ever acquire, or even aim at, a higher course of training? Higher education need never suffer from the diffusion of general information among the people; but should it so suffer, we deem the latter of far more importance, and of infinitely greater advantage to the country. However deficient a child may be in higher mathematics, however imperfect his knowledge of Ancient classics, if he leaves school with a taste for reading that he will gratify at every opportunity, then is his education accomplished in a manner that reflects honor upon his instructors.

The system to be followed, in establishing school libraries, is a question of importance, and one that invites the careful attention of school authorities. That system is the best, which provides for each district a library selected with considerate judgment and wise discretion. It is always desirable that the library should be kept at the school house, at least during the term of school, that all persons in the district should be allowed to avail themselves of its benefits, and that it should be in charge of the teacher. No more foolish measure could be taken than that adopted by some of the states in enacting that school libraries shall be accessible to students only. Libraries are an educating medium, designed for the disseminating of information among the people, and the enlightenment of the masses, irrespective of age or condition. The library should be kept at the school-house, that the children may have more ready access to its contents, for many may be induced to peruse a work that they have no trouble in obtaining which they would not do were any exertion on their part necessary to gain possession of the volume. Other reasons for keeping the library where it will be convenient to teacher and pupils will appear further on. The teacher is the fittest person for librarian, because, being a person of some attainments, he will naturally take an interest in books. Moreover, if he be endowed with a due proportion of judgment and common sense,—which is sometimes the case,

popular opinion to the contrary notwithstanding—he will often be of service in assisting students to make proper selections, such as will suit their age and proclivities.

The selection of books for a school library is a matter of grave importance, in which we cannot exercise too much caution. It requires a better judgment and a more comprehensive knowledge of human character than any other duty that devolves upon school managers. And yet, we must admit, that accident will often provide a district with a more suitable list of books than the best judgment would dictate. This is certainly often the case in Michigan, whose deserved prominence in all matters pertaining to education is more owing to the fact of her having a greater number of school libraries than any other State in the Union, than to the influence of her great University or any law on her statute books. There the officers of each district have the sole power of selection, which power is governed almost entirely by accident. The consequence may be easily guessed, for accident throws in their way all kinds of trash, as well as all kinds of merit, and thus gratifies the taste of all classes of people. Hardly a library in Michigan but has representatives of each round of the ladder, from "Robinson Crusoe" up to the more profound works of DeQuincy, or Bacon. Thus a natural highway is provided from popular nonsense to entertaining subtleties. In California it is the reverse, although there, as well as in Michigan, provision is made for a library in every district. In California, district officials have the power of selection, but that power is crippled by the State Board, by whom a list is furnished—all machine work - from which, alone, are they allowed to choose. So by an over-exertion of poor judgment and limited discretion the Trustees have succeeded in storing the libraries with a curious medley of unattractive nonsense, and still less attractive profundity, without a proportion of intermediate stepping-stones. A library of this character need not fear being molested, for it is uninviting. Like a ladder with two steps, it can not be mounted, for one step is at the bottom, the other at the top, beyond the reach of the tallest. Jacob Abbot's "Stories for Children," or Mayheuer's "Young Ben. Franklin," may be seen gracing the same shelf with, and cheering the solitude of, Young's "Night Thoughts," and Carlyle's "French Revolution," which stand in undisturbed serenity with uncut leaves, casting a somber gloom around. Although the inhabitants of California are a reading people, the libraries are universally ignored, for the simple reason that they do not furnish the right kind of matter. The non-providing of works suitable for an intermediate stage of thought, we conceive to be the greatest mistake commonly made in the selection of a school library.

In an attempted selection of books suitable for common schools, we are impelled to the conclusion that the judgment errs in a too common avoidance of fiction, especially the better class of fiction. Better read *poor fiction* than nothing. Fiction, with adventures, forms the only link between works for children, and history. But in selecting novels only standard authors should be represented. Whoever thinks that Dickens, Cooper, or Charles Reade is out of place in a school library, has an unjust conception of human nature. As fiction is the natural sequel to childish stories, so history is the natural sequel to fiction, and, with a few auxiliaries, the sole connecting link between it and the more profound works of the best authors.

In the course of several years' experience, we have observed that nothing pleases a pupil more than to get hold of a reader of the same grade as the one in which he is studying, but of a different series. It follows, therefore, that access to books of this kind will naturally aid in developing that desire for investigation which is an inherent quality of every human bosom. Moreover, these readers contain many choice extracts and morsels of English literature, with which it is beneficial to become acquainted, and which will stimulate the appetite to a keener relish. But these works may be put to a more profitable use, providing the library contains several series, and, as before suggested, if it is kept at the schoolhouse. There is much time in school when the younger scholars are unemployed, or, at least, not employed in anything useful. Now the prevailing notion that only books designed for study should be allowed in a school-room is an enormous one, and it is for the very purpose of filling up the gap of time and turning to account unoccupied moments, that we should store every library with works of this character. These books we would distribute among the pupils, with the injunction to read only for a given time and at stated intervals. One-half hour each day is sufficient time, and if no infringement of the law is tolerated, the teacher will soon observe that the half hour is looked forward to with anxious faces and greedy eyes. The taste for reading which this will incite in the pupil is not the only benefit derived, for the child is thus continually coming in contact with different words in different connections, which it unconsciously masters, and it thus proves an estimable help to the reading exercise.

Believing that a taste for reading leads directly to the acquirement of varied and useful information, and such information as tends to elevate the standard of citizenship, it shall ever be our endeavor to develop in students a love for general reading, and in that endeavor we shall make all other objects subservient to this end.

JOHN M. EDDY.

HALF HOURS WITH THE MICROSCOPE.

N

BY T. J. B.

O——h! This was the involuntary exclamation of a student in the class-room the other day as she saw, for the first time, through the microscope, one of the common moulds found upon decaying substances. It was during recitation time; others had looked, and had quietly returned to their seats. She had read of the plant, had seen pictures of it in the books, had, with the others, been told what to expect as she looked through the instrument, yet the actual sight of the little tree-like fungus itself under the magnifier, so far exceeded her anticipations, that, forgetful for the moment of the time and place, she gave expression to her surprise and delight as above indicated. The case is not cited for its singularity,—the reverse being true,—but to serve as an introduction to the following statement:

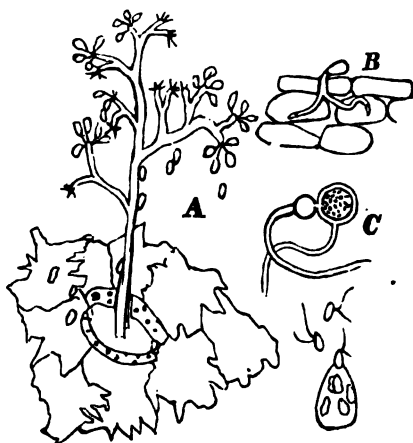
Nature, with all her multiplicity of details, and wonderful variety of forms, can never be fully appreciated at second hand. He who would see the real beauties of creation, must use his own eyes—not upon somebody's representation of the objects, but upon the things themselves. A proof of this assertion will be found in the interest felt by the readers of this paper, compared with that which prompts its writing under a heavy burden of other duties.

But *some* of its readers may be stimulated to open their eyes wider than heretofore, or, may be, use them to somewhat better advantage; if so, the labor will be repaid, however little may be gained from this presentation. A microscope of some kind is essential for the studies here given, but let it be remembered that the lenses simply aid the eye, and in no sense take the place of the latter. Thousands of similar observations, usually neglected, can be made without such aid.

This article may as well be given to the "moulds," following the direction of the introductory incident. But a volume would scarcely relate the facts known concerning these lowly organized plants. Our attention will be given to two or three found upon living leaves.

The Lettuce Mould. Gardeners have reason to fear that one source of revenue is to be taken from them, at least in part, and we who relish the crisp leaf (lettuce) as a salad in the early spring-time, may, in the new years of our second century, be disappointed in not finding the market supplied. Hundreds of dollars' worth have been destroyed in Illinois the last

two years, by the little intruder too roughly shown in Fig. 1. Its near re-

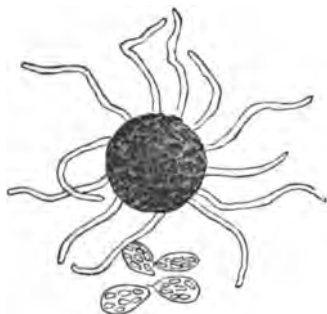


[Fig. 1]

lation caused the Irish famine in 1846, and has since, at various times and places, made sad havoc with the common potato. Little is to be seen in either case, by the unaided eye, except the diseased and dying condition of the leaves of the plants affected; the true cause would probably never have been known without the microscope. Looking closely, however, at a rotting leaf, patches of ash-colored mould are seen. Sometimes a thin cloud of dust can be observed when such a leaf is disturbed. Taking upon the point of a needle a bit of the dusty material from the leaf, and examining with a power of fifty diameters, a miniature tree in full fruit, may be discerned, not unlike the figure at A. Several of them, 1 to 6, arise from each stoma, or "breathing-pore." Fifty to seventy-five spores (seed like bodies) are borne on a fruit-stalk, and not less than 500,000 to the square inch of leaf surface. Of course they are very minute, readily floating upon the air. Thus the light cloud before mentioned is explained. Any one of these atoms falling upon a healthy leaf, under the proper condition of temperature, moisture, etc., may cause again the disease noticed. The manner of germination is shown at B, Fig. 1, where a cell of the epidermis is represented as pierced by the growing filament, which afterwards spreads through and among other cells. Within forty-eight hours after this, little white branching threads start in tufts from the stomates, and quickly give origin to another crop of spores. A power of from 50 to 300 diameters will be required to trace these processes. The threads and spores look pearly white under the microscope, but, like clear water, exhibit color when seen in thick enough stratum.

The life history of this wonderful little plant is by no means fully told, it having other ways of reproduction and perpetuation, but we will pause here. In the figure two other chapters are indicated.

The garden plants being under discussion let us notice the "mildewed" leaves of the pea: It is well known that peas do not succeed well with us, except in early spring. One of the reasons of this will now become apparent. Plucking one of the whitened leaves and examining it under a medium power, in a good light, we find shining threads and spores, as in the last case, but the forms are different. No one would mistake, after seeing both, one for the other. Omitting the first part of the biography here, we look at the sickly stems and leaves with an ordinary hand magnifier and soon discover in little communities, nestled among the parts of the white coating, shining black balls, appearing something like the mark which closes this sentence. Carefully remove these with a sharp knife to a glass slide, and, after adding a drop of water, examine with a power of two hundred diameters. All such observations are better made if a thin glass cover is placed upon the object. Our black point now appears as it is, a finely sculptured globe of a dark brown color, seated upon conspicuous radiating threads of clear and pretty appearance. Fig. 2. One will be apt to look much longer

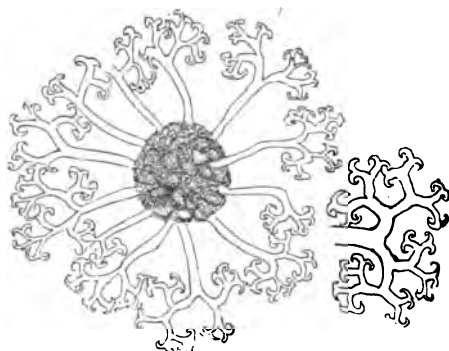


[Fig. 2.]

than we can wait now. So changing the power to one greater, should it be at hand, and pressing very gently, but firmly, upon the thin cover glass, we look again. The pretty globule is broken by the squeezing it had, and fortunately its contents are revealed. Four to eight transparent sacks, each having as many spores, have been forced from the fissure in the walls of the brown ball. It is a wonder how its narrow limits contained so much, but the fact is nevertheless certain, these bags of flexible glass, with their contents, came from the sculptured ball. This second fruitage of the fungus—

for all the moulds, mildews, smuts, etc., belong to the Fungi—appears to be for the purpose of bridging the winter. They are produced only in autumn, while the spores originating from threads in the open air are borne during the summer months.

Lilac Mould. The dusty or whitewashed appearance of the leaves of the common lilac—*lalock* we used to say—in autumn can hardly have escaped observation. This is due to the growth of a very pretentious relative of the pea mould. Its first stage is not known to be in any way remarkable, though an observation made to-day (Sept. 27th), seems to point to a hitherto unrecorded feature—but the second form of fruit is adorned after the manner of the upper *ton*. The globules may be found as before. Sharp eyes unaided may detect them. After a little practice a promising leaf is easily selected, and a pocket magnifier assures us of our prize. To secure perfect specimens care is needed in the transference to the slip of glass; here again practice is required. Figure 3 does poor justice to the real appearance



[Fig. 3.]

of the object, though the drawing was made by a camera lucida as close as possible to nature. The tip of one thread is shown upon a larger scale. The central globule is mahogany brown, and finely reticulated, the radiating appendages are of crystalline purity, and are exquisitely beautiful. Inside there are six spore sacks, with about six to eight spores each. The lilac bears a handsome flower, but entertains a parasite which surpasses it in delicate beauty and elegance.

The botanical names of these three plants (moulds) are as follows: *Peronispora gangliiformis*, *Erysiphe Martii*, and *Microspheria Friesii*.

OPENING EXERCISES.—II.

In the September number of the *SCHOOLMASTER*, I presented a little of my own experience upon the manner of opening a school, but much that is really very valuable was omitted, and it can be no more than justice to myself to introduce it here. Choice selections of poetry, or even prose, may be read, or better, recited, by the entire school.

Write upon the board the lines upon "The Sculptor Boy :—"

"Chisel in hand stood the sculptor boy,
With his marble block before him ;
And his face lit up with a smile of joy
As an angel dream passed o'er him.
He carved that dream on the yielding stone
With many a sharp incision ;
In Heaven's own light the sculptor shone,—
He had caught that angel vision.

"Sculptors of life are *we*, as we stand
With our lives uncarved before us,
Waiting the hour when at God's command,
Our life-dream passes o'er us.
Let us carve it then on the yielding stone,
With many a sharp incision ;
Its heavenly beauty shall be our own,—
Our lives that angel vision."

The teacher would then do well to read the lines with as much meaning as he can command, then ask the school to read in concert. In a short time all will have learned it, then call attention to the appositeness of the figure and enforce the lesson, so far as it may be done, by judicious words. Certainly there is nothing objectionable in this selection, to Jew or Mohammedan. My own opinion is that the teacher can do much towards creating and keeping alive a wholesome, cheerful, vivifying sentiment in the entire school, simply by his personal demeanor, and evidently this sentiment may be strengthened by the singing of cheerful songs and the reciting of energizing verses. The following lines will illustrate the idea of whole-heartedness in our words :

"Better to weave in the web of life
A bright and golden filling,
And do God's will with a ready heart
And hands that are swift and willing,
Than to snap the delicate, slender threads
Of our curious lives asunder.
And then blame Heaven for the tangled ends,
And sit, and grieve, and wonder."

After the recitation of such a piece, sing "Always Cheerful," or other words suited to the sentiment. Adapt the lesson to the needs of the school so far as can be done.

"Too late, too late," was never said
 Of morning sun, or bud, or flower ;
 The light is true to hill and glade,
 The rosebud opens to the hour,
 The lark ne'er asks the day to wait ;
 But man awakes "too late, too late!"

Punctuality may be encouraged by the rehearsal of these lines. Sing "Always Prompt to School." The teacher may find it necessary to explain the use of the word "but," in the last line; substitute "only."

Portia's speech on mercy furnishes a choice paragraph for general repetition. I suppose not even the Jew would object to this, — unless he be related to Shylock. Whatever may be said about it, we all, both Jew and Gentile, need the influence of its beautiful teachings.

It is related of Isocrates that he caused to be written in gold letters above his school-house door, "If thou love learning, thou wilt attain unto much learning," in order, perhaps, that his pupils might become enthusiastic in the pursuit of knowledge. Modern teachers would do well to write in some conspicuous place these words :

"If wisdom's ways you'd wisely seek,
Five things observe with care ;
 Of whom you speak, to whom you speak,
 And *how*, and *when* and *where*."

No less an estimate should be placed upon the words which follow :

"Think truly, and thy thoughts
 Shall the world's famine feed ;
 Speak truly, and each word of thine
 Shall be a fruitful seed ;
 Live truly, and thy life shall be
 A great and noble creed."

I have long thought that some of the old-fashioned virtues, which have been much neglected, could be *inoculated* into the veins of the young generation by the veritable schoolmaster.

Industry is one of the most important, for, however hackneyed the subject may have become, it still remains true that laziness is the curse of the world. Most boys and girls are always tired, intellectually speaking, and, indeed, we all must be born again into the intellectual world, converted, if you please, from our mental depravity before we put on the whole armor of an earnest worker. To bring about this new life in the mind every available means should be utilized.

It may be useful to arrange some of the virtues which it is desirable to emphasize, in groups upon the board, thus :

- | | | |
|-----------|---|-----------------|
| Industry. | { | 1. Order. |
| | | 2. Punctuality. |
| | | 3. Energy. |
| | | 4. Patience. |
| | | 5. Ambition. |
| | | 6. Politeness. |

THE SCHOOLMASTER needs a more fitting history than we can write. For twenty-two years this Journal has made its monthly visits to its thousands of readers. Begun in the early days of educational effort, it has seen the prairies blossom into fruitful fields, and the log school-house of the protecting grove give way to the pretentious "brick" of hundreds of villages. It has lived through a period marked by as significant reforms in educational methods and appliances as have characterized any other department of our complex civilization. It, in turn, must give way to the inexorable law of advance.

We hope to be as near the teachers of Illinois in our new relations as in the old. For eleven and a half years we have been identified with the public schools of this State. We believe that we have its interests in our heart of hearts. Without indulging in any professional egotism, we hold that the school interests are the highest interests. Whatever mars their weal, mars the cause of humanity. Whatever helps to elevate them, falls into the ranks of the forces that are striving to make our wandering planet rich with the harvests of God's sowing. The future, with all its mighty possibilities, is an awful presence in every school-room. Every true teacher is a high priest of a new dispensation, richer with blessings than any the past has known.

With harmony in our ranks, and faith in our hearts, and patient industry in our lives, we can raise this noble system of schools to a perfection that shall shame the past and ennoble the new century of our national life.

We regret that we have been obliged to omit a portion of the Chicago letter, but it could not be avoided.

A correspondent sends us the following :

A mathematical editor is surely needed for some of our educational journals, if we may judge from the mathematical exploits in the issue of the past month.

One educational editor inserts as "*doubtless correct*" a rule for computing interest at fifteen per cent., as follows :

"Multiply by number of days, and divide by three."

The editor very properly says that he "*has not verified*" this method. As its truth depends solely upon the question whether the product of fifteen by three is three hundred and sixty, it would seem as though ten seconds, more or less, might have been profitably consumed in the occupation of dividing three hundred and sixty by fifteen. This pleasing experiment would doubtless have resulted in the substitution of twenty-four for three, and would have redounded largely to the credit of the representative educational journal of the Hub.

Another journal, published in a larger center of civilization, says :

"A piece of land in the form of a trapezoid 1,800 yds. long, 300 yds. at one end and 100 at the other. Now, to divide the piece equally. Find perpendicular distance between ab and nz , nz and em , em and cd , also

lengths of *nz* and *em*." Now, if any human being can make what he considers sense out of this so-called problem, he should be recommended at once as a candidate for a permanent position in some good lunatic asylum. Pray, what is meant by "Now, to divide the piece equally." And, without a diagram, what can be made of the author's requirements as to *cd*, *em*, *nz*, etc.? Is the whole thing a *ho-ax*? or a prize problem? or a conundrum? Pass it along. We give it up. O. S. W.

CHICAGO DEPARTMENT.

JAMES HANNAN, EDITOR.

It is stated that Mr. R. I. CHASE, who was elected Principal of the Jones School in place of Mr. KIRK, who has gone to Missouri, will not come. He is at present engaged in the schools of Plymouth, Indiana. It is not known whether his refusal to come is based on the nature of his engagement at that place, or his unwillingness to risk starvation in the metropolis at present and prospective salaries. Mr. CHASE is understood to be a first-class man and one whom it would be very desirable to secure for Chicago. Perhaps Chicago will learn, after a while, that to secure first-class men or to keep those she has, she must keep the wolf from their doors by paying as good salaries as Buntown or Grange Center.

There are too names to be added to the already too long list of teachers who have left the schools of Chicago the present year. Mr. WM. T. BELFIELD, for several years connected with the Central High School as general assistant and afterward a teacher in the South Division High School, has resigned. He was uniformly and conspicuously successful in both discipline and instruction, but he was guilty of the crime of being a young man, and was subjected to what we cannot forbear calling most unjust discriminations. His salary was reduced within two years from \$1,800 per annum to \$750. It is scarcely an exaggeration to say that Mr. BELFIELD has been driven out of the schools to enter Rush Medical College. His attainments and qualifications were so apparent to the faculty of that institution, that immediately upon his examination for admission he was given an honorable and responsible position in the Laboratory.

Miss EMMA A. STOWELL, for years connected with the schools, first in the lower grades, then as head assistant in the Clarke School, and since the death of Miss BYRNE as assistant in the North Division High School, has also resigned. While perhaps we would not be justified in attributing her resignation to any legislation on the salary question, it is barely possible that that legislation has had something to do with hastening the happiness of a Mr. Fox, of Peoria, whose somewhat unpoetic name Miss STOWELL has assumed since leaving us.

It becomes the painful duty of the editor of this Department to witness the absorption of this journal, including this Department, by a buoyant, hopeful and enthusiastic new (prospective) Chicago weekly. It is not because he regrets the establishment of a weekly educational journal in this great commercial and educational center that this duty is characterized as painful. But it is because he had fondly imagined, and expected to witness, and be instrumental in promoting, the growth of this Department in such a journal as *THE SCHOOLMASTER*.

The editor of this Department claims its establishment as his own idea. It was at his suggestion and solicitation that the proprietors of *THE SCHOOLMASTER* consented to its establishment. He acknowledges that when that consent was obtained he had the temerity to write and issue some hundreds of circulars, in which it was stated that "the acknowledged intrinsic merits of *THE SCHOOLMASTER* are

sufficient to exorcise that perpetual shade of impending starvation which has paralyzed the courage, and thereby destroyed the usefulness of many of the educational journals. The establishment of the Chicago Department and office is a result of healthy growth, and a desire to *extend* a success and a usefulness already established. THE SCHOOLMASTER comes to *stay*."

These statements were honestly made. So far as they related to the character and circumstances of THE SCHOOLMASTER, they were made "upon information and belief," and no one will question them. So far as they related to THE SCHOOLMASTER's intentions in reference to Chicago, they were based on the convictions of the Editor, and—well—his faith in himself. It is to be regretted that in making his calculations, however, he ignored one element. He took into account the prospects and capabilities of THE SCHOOLMASTER, and he made an estimate of himself; but he never for one moment imagined an ambitious and enterprising company of young men roaming about the country with plethoric pocket-books buying up educational journals at wholesale, and to whom the well-beloved SCHOOLMASTER was to fall a victim! He submits the rarity of such a phenomenon in extenuation of what has proved to be his rash promises.

The error is more apparent than real, however. THE SCHOOLMASTER will come in his successor, and *will*, doubtless, *stay*.

The biennial school census of the city has been completed. From it we learn that there are 74,315 children in the city under 6 years of age; that there are 15,275 children under 16 years of age; that there are 184,499 persons under 21 years of age, and that the total population of the city is 407,661. Moreover it appears that there are 18,664 persons in the city attending private schools, though these institutions report as enrolled 27,637 pupils; that there are 20,767 persons under 21 years of age regularly at work, and that 283 persons between the ages of 12 and 21 years have been found unable to read or write. The October summary of attendance shows the whole number enrolled in the public schools of the city to be 43,512, the average membership to be 40,677, and the average daily attendance to be 38,625.

One of the suggestive facts brought out by the school census is the proportion of male and female teachers in public and private schools. Out of upwards of 700 teachers in the public schools, but 33 are males. Out of 653 teachers in private schools, 260 are males. There can be no doubt that in many, perhaps a majority of instances, private schools owe their attractiveness and prosperity to the presence of so large a proportion of male teachers. Without in anywise detracting from the excellence of the work of lady teachers, the number of men in the public schools of Chicago is too small. In this connection we desire to put on record our solemn and deliberate conviction, and that without finding fault with anyone: That a wise system of public education requires the constant care and presence and work of at least one capable *man* in every standard school building.

The November meeting of the Principals' Association was held at the rooms of the Board of Education, 85 Fifth avenue, at the usual hour. Superintendent PICKARD presided.

It was suggested that the course of instruction did not make it imperative that a year should be spent in the new first grade. Neither was it imperative that that work should be done within the year. Principals were urged to promote classes when the grade work was completed, without special reference to the time spent in the grade, to the end that the mobility which has heretofore characterized the Chicago school system might be preserved. There was danger of falling into the error of promoting only at the end of the year, under the new system of grades, which should be carefully guarded against.

Mr. BAKER, of the West Division High School, asked as to the advisability of introducing more mobility into the High School classes. It would be an advantage

to some pupils to fall back six months, while to fall back a year was accompanied by grave discouragement. The Superintendent intimated that the plan already partially adopted, of admitting pupils to the High School semi-annually, might do something in the direction of relief by the consequent formation of new classes. More frequent admissions had not proved advantageous where that scheme was tried.

Principals were instructed that keeping the school-buildings open for half an hour before the opening of each session was a sufficient length of time to accommodate pupils in all but very exceptional instances, and would be satisfactory to the Superintendent, to whose discretion the matter of earlier opening of the school-buildings had been left by the Board of Education.

The discussion of the subject of Mental Arithmetic, which had been assigned for the day, was postponed till the next meeting, in order that the Association might listen to certain notes on the Centennial Exhibition, made by Superintendent PICKARD during his recent visit.

At the close of Mr. PICKARD's remarks, which were informal, conversational, and exceedingly interesting to those who had not visited the Centennial, and more so to those who had, the Association tendered the speaker a unanimous vote of thanks.

PRINCIPALS OF GRADED SCHOOLS.

EDGAR COUNTY.

A. Harvey, Paris.
C. W. Jacobs, Kansas.
J. K. Failing, Vermillion.
D. H. Ross, Inclose. Address, Kansas.

EDWARDS COUNTY.

Edward Balentine, Albion.

EFFINGHAM COUNTY.

Miss E. P. Cooper, West Side, Effingham.
Miss Carrie Riddle, East Side, Effingham.
W. H. English, Altamont.
Samuel Bartley, Mason.
H. H. Hendee, Watson.
Louis Rieg, Teutopolis.

FORD COUNTY.

T. L. Evans, Paxton.
E. G. Walker, Gibson City.
Rev. Wm. Morrow, Piper City.

FULTON COUNTY.

A. S. Grinnell, Lewistown.
A. B. Leaman, Canton.
C. L. Howard, Farmington.
LeRoy S. Bates, Avon.
Clark Robbins, Vermont, North School.
William Shippy, Vermont, South School.
Miss Alice Welch, Ipava.
Abram Neff, Cuba.

JEFFERSON COUNTY.

Prof. J. L. Frohock, Mt. Vernon.
S. L. Mouroney, Spring Garden.
Prof. Wm. Walters, Bellrive.
Miss M. J. Mitchell, Fitzgerald.

JERSEY COUNTY.

Jo-hua Pike, Jerseyville.
W. Roberts, Grafton.
Benjamin Corey, Otterville.
— Odell, Fidelity.

JO DAVIESS COUNTY.

Samuel Hayes, Jr., Galena.
M. H. Bermingham, Dunleith.
David E. Garver, Warren.
H. B. Lathe, Nora.
Thomas Bermingham, Apple River.
C. E. Davis, Hanover.
Wm. H. Gardner, Elizabeth.

KANE COUNTY.

M. Quackenbush, Dundee.
C. F. Kimball, Elgin.
W. B. Guild, West St. Charles.
M. L. Holt, East St. Charles.
C. E. Mann, Geneva.
O. T. Snow, East Batavia.
A. S. Barry, West Batavia.
W. B. Powell, East Aurora.
M. L. Hastings, West Aurora.
Frank Starks, Kaneville.
G. H. Wright, Blackberry.

KENDALL COUNTY.

J. H. Rushton, Plano.
J. H. Best, Bristol Station.
C. C. Duffey, Oswego.
E. C. Okey, Bristol.
D. Campbell, Yorkville.
Miss Wing, Newark.

KNOX COUNTY.

John H. Stickney, Altona.
T. C. Swafford, Oneida.
James Kinney, Wataga.
Matthew Andrews, Galesburg.
J. A. Badger, North Abingdon.
J. B. Strode, South Abingdon.
H. L. F. Roberson, St. Augustine.
Frank A. Freer, Henderson.
J. W. Bird, Knoxville.
Wm. F. Palmer, Maquon.
W. T. Steele, Yates City.

EDUCATIONAL INTELLIGENCE.

REPORT OF ATTENDANCE FOR OCTOBER, 1876.

	No. of Days of School.	Av. Number Enrolled.	Av. Daily Attendance.	Per Cent. of Attendance.	No. of Tardinesses.	No. neither absent nor Tardy.	PRINCIPALS.
*Chicago.....	21	43312	88625	94-9	8657		
Peoria.....	21	3834	2828	92-6	420	1194	J. L. Pickard.
Bloomington.....	20	2658	2200-9	95	736		Sarah E. Raymond.
Belleville.....	22	1794	1635	92	270	727	Henry Raab.
Rock Island.....	20	1618	1500	88	81	640	J. F. Everett.
Danville.....	20	1407	1107	84	381	404	C. M. Taylor.
Alton.....	20	1007	887	88	223	335	E. A. Haight.
*Moline.....	20	944	864	97	39	557	L. Gregory.
Warsaw.....	22	744	711	95-3	109	281	John T. Long.
Urbana.....	22	675	581	86	890	220	J. W. Hayes.
Centralia.....	20	641	601	93	122	253	C. H. Tatman.
Morris.....	20	646	547	84-6	423	185	M. Waters.
Shelbyville.....	20	627	498	91-8	81	182	A. P. Allen.
Amboy.....	22	603	498	82-6	89	143	L. T. Regan.
*Joliet.....	20	478	449	93-2	404	131	W. S. Mills.
Sandwich.....	20	472	405	87-2	46	168	A. E. Bourne.
Clinton.....	22	470	424	90	18	245	R. E. Morrow.
Sterling, 3d Ward.....	20	462	443	95-8	65	269	Alfred Baylis.
Rochelle.....	20	460	421	91-5	24	262	P. R. Walker.
Carthage.....	20	431	335	87	67	118	F. A. North.
Wichita, Kas.....	20	395	344	87	174	119	O. F. McKim.
Petersburg.....	22	394	294	87	541	54	C. L. Hatfield.
Lacon.....	20	385	327	93	86	99	L. C. Dougherty.
Sterling, 3d Ward.....	20	382	319	95	77		J. M. Piper.
DuQuoin.....	22	377	300	79-5	129	101	John B. Ward.
Salem.....	20	367	346	94-3	57	250	N. S. Scovell.
Monticello.....	20	346	268	82	121	93	Jesse Hubbard.
Griggsville.....	20	337	304	90-4	58	160	R. M. Hitch.
Champaign, East Side.....	22	300	256	85-4	70	82	E. DeBurn.
Forreston.....	20	283	221	78-4	85	53	J. L. Wright.
Oregon.....	20	276	231	93	64	186	S. B. Wadsworth.
Farmington.....	22	274	265	83	92		C. L. Howard.
Chatsworth.....	20	242	206	85		75	A. A. Crary.
Colchester.....	22	240	210	87-5			C. W. Parker.
Odell.....	22	236	188	80	92	62	W. W. Lockwood.
Rantoul.....	22	222	176	84-6	127	64	I. N. Wade.
Marine.....	22	209	165	80	72	34	Wm. E. Lehr.
El Paso, E. Side.....	22	203	170	83-7	264	50	P. M. James.
Newman.....	22	185	141	76	87	33	Allen Waters.
Odin.....	20	182	156	85	24	60	J. W. Cokenower.
Illtopolis.....	22	172	128	74-2	150	100	Edwin Auerswald.
Elizabeth.....	22	170	186	80		72	Will H. Gardner.
Tolono.....	22	159	122	76-1	135	19	M. E. Moore.
Troy.....	20	157	180	83	70	43	T. L. Matchett.
Byron.....	20	143	121	91-5	25		John T. Ray.
Raymond.....	20	137	105	76	190	50	J. H. Young.
Dongola.....	22	134	94	70			W. T. Freeze.
*Huntley.....	22	130	123	85	10	52	N. E. Leach.
Walnut.....	20	127	105	82-2	56	88	G. P. Peddicord.
Fairmount.....	22	120	109	90-9	95	80	B. F. Stocks.
Palestine.....	20	98	68	67-5	90	28	D. T. Stewart.
Ogden.....	20	92	67	73	79	34	T. C. Clendenen.
Roscoe.....	20	88	69	78-7	10	41	Harrison Clarke.
Millersburg.....	20	88	72	82-2	37	37	J. T. Johnston.
Iuka.....	22	70	60	85	18	41	Hester Bloya.
Winfield.....	20	41	23	56-3	50	4	Miss M. J. Mitchell.

NOTICE.—These reports must reach us before the 16th of the month to insure publication.

*Old Rules.

BOOK TABLE.

Zell's Popular Encyclopedia. BAKER, DAVIS & Co.: Philadelphia. J. W. MASH, Agent, 722 N. Fourth street, St. Louis.

We have received numbers 17-20 of this publication. They carry the work from "Capt." to "Dott." and complete 800 pp. We are sometimes asked to recommend a cyclopedia within the reach of our common schools, and we have no hesitation in saying that this is admirably adapted to the purpose. It is sufficiently full for ordinary purposes, and has the merits of conciseness and accuracy. For particulars address the agent, as above.

First Book in Arithmetic. By MILTON B. GOFF, A. M. A. H. ENGLISH & Co.: Pittsburg.

We have examined this book with considerable care, and find much to commend. It and the book which we notice below comprise the entire series. The early lessons are accompanied by illustrations which afford valuable aid in developing the successive steps.

On p. 67 the author has introduced what may be termed the second case in division,—the separation of numbers into equal parts. This is something which some authors have an unfortunate habit of overlooking. The explanations are clear and accurate for the most part, although we think the author has presented the more difficult explanation in subtraction, and omitted the more difficult in multiplication.

Fractions are treated with much discretion. The topic is the most difficult, and this feature of the book strikes us as the best. The explanations of operations in compound numbers are also unusually good.

The author makes the common error of mistaking figures for numbers. We hope that these defects in this excellent little book may be removed from subsequent editions. We also object to calling a figure an order. The weakest points are in the first few lessons. The subject is developed too rapidly. In the hands of competent teachers this is no objection, but inexperienced teachers are inclined to follow the text with a slavish obedience, and there is no danger of being over explicit. On the whole we pronounce it *good*. It has some novel features well worthy of notice. We advise teachers to see it. The price is 40 cents. Address J. N. HUNT, Rock Island.

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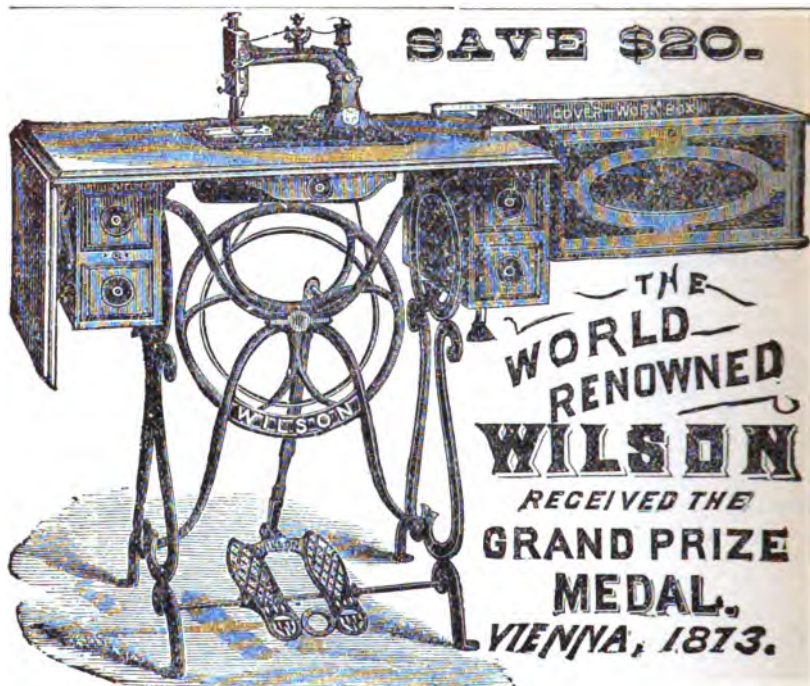
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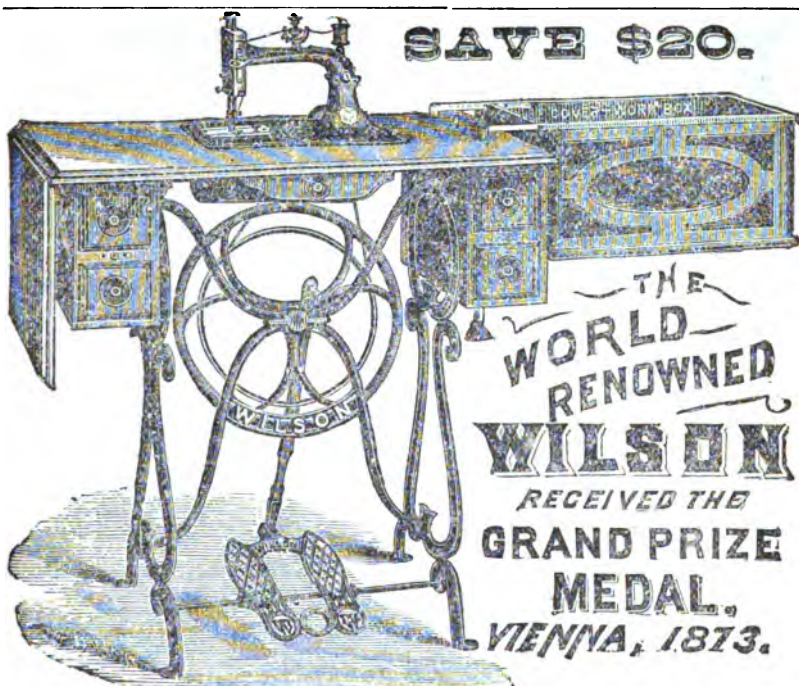
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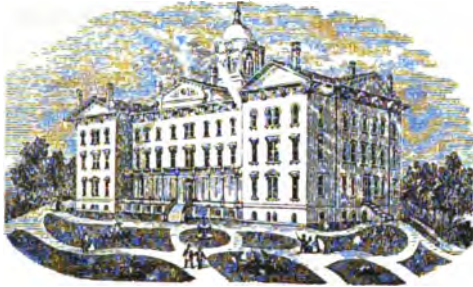
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Articles for Vol. XI., 1877,

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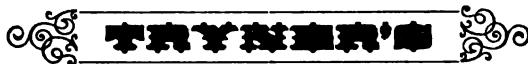
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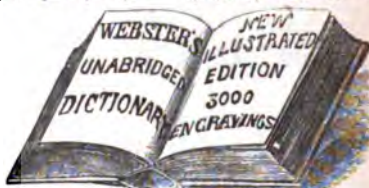
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{ CHICAGO SCHOOLMASTER.
Volume IX.

ILLINOIS SCHOOLMASTER.

Bureau of Education

JOHN W. COOK AND EDWIN C. HEWETT,

EDITORS AND PROPRIETORS.

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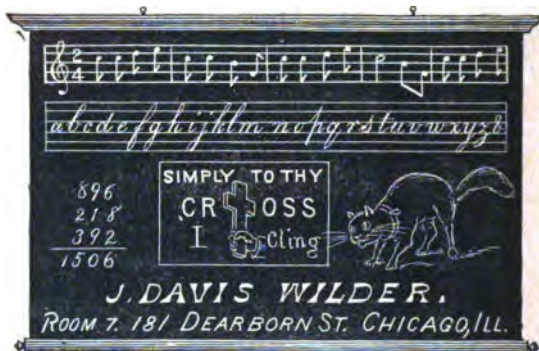
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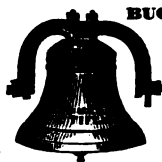
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